Title 40
Protection of Environment

Part 63 (§§ 63.6580 to 63.8830)

Revised as of July 1, 2016

Containing a codification of documents
of general applicability and future effect

As of July 1, 2016

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Table of Contents

Explanation ........................................................................................................... v

Title 40:

Chapter I—Environmental Protection Agency (Continued) ............ 3

Finding Aids:

Table of CFR Titles and Chapters ............................................................... 489
Alphabetical List of Agencies Appearing in the CFR ....................... 509
List of CFR Sections Affected ................................................................. 519
Cite this Code: CFR

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Title 1 through Title 16..............................................................as of January 1
Title 17 through Title 27 .................................................................as of April 1
Title 28 through Title 41..............................................................as of July 1
Title 42 through Title 50.............................................................as of October 1

The appropriate revision date is printed on the cover of each volume.

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An index to the text of “Title 3—The President” is carried within that volume.

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OLIVER A. POTTS,
Director,
Office of the Federal Register.
July 1, 2016.
Title 40—Protection of Environment is composed of thirty-seven volumes. The parts in these volumes are arranged in the following order: Parts 1–49, parts 50–51, part 52 (52.01–52.1018), part 52 (52.1019–52.2019), part 52 (52.2020–end of part 52), parts 53–59, part 60 (60.1–60.499), part 60 (60.500–end of part 60, sections), part 60 (Appendices), parts 61–62, part 63 (63.1–63.599), part 63 (63.600–63.1199), part 63 (63.1200–63.1439), part 63 (63.1440–63.6175), part 63 (63.6580–63.8830), part 63 (63.8980–end of part 63), parts 64–71, parts 72–79, part 80, part 81, parts 82–86, parts 87–95, parts 96–99, parts 100–135, parts 136–149, parts 150–189, parts 190–259, parts 260–265, parts 266–299, parts 300–399, parts 400–424, parts 425–699, parts 700–722, parts 723–789, parts 790–999, parts 1000–1059, and part 1060 to end. The contents of these volumes represent all current regulations codified under this title of the CFR as of July 1, 2016.

Chapter I—Environmental Protection Agency appears in all thirty-seven volumes. Regulations issued by the Council on Environmental Quality, including an Index to Parts 1500 through 1508, appear in the volume containing parts 1060 to end. The OMB control numbers for title 40 appear in §9.1 of this chapter.

For this volume, Susannah C. Hurley was Chief Editor. The Code of Federal Regulations publication program is under the direction of John Hyrum Martinez, assisted by Stephen J. Frattini.
CHAPTER I—ENVIRONMENTAL PROTECTION AGENCY (CONTINUED)


SUBCHAPTER C—AIR PROGRAMS (CONTINUED)

<table>
<thead>
<tr>
<th>Part</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>63</td>
<td>5</td>
</tr>
<tr>
<td>National emission standards for hazardous air pollutants for source categories (Continued)</td>
<td>5</td>
</tr>
</tbody>
</table>
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 new or reconstructed 4Slb SI stationary RICE with a site rating of greater than or equal to 250 and less than or equal to 500 brake HP located at a major source of HAP emissions?
63.6602 What emission limitations and other requirements must I meet if I own or operate an existing stationary RICE with a site rating of equal to or less than 500 brake HP located at a major source of HAP emissions?

General Compliance Requirements

63.6603 What emission limitations, operating limitations, and other requirements must I meet if I own or operate an existing stationary RICE located at an area source of HAP emissions?
63.6604 What fuel requirements must I meet if I own or operate a stationary CI RICE?

Testing and Initial Compliance

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

Continuous Compliance Requirements

63.6606 How do I monitor and collect data to demonstrate continuous compliance?
63.6607 How do I demonstrate continuous compliance with the emission limitations, operating limitations, and other requirements?

Notification, Reports, and Records

63.6608 What notifications must I submit and when?
63.6609 What reports must I submit and when?
63.6610 In what form and how long must I keep my records?

Other Requirements and Information

63.6606 What parts of the General Provisions apply to me?
63.6607 Who implements and enforces this subpart?

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

Table 1B to Subpart ZZZZ of Part 63—Operating Limitations for Existing, New, and Reconstructed SI 4SRB Stationary
| Table 2A | 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 | Operating Limitations for New and Reconstructed 2SLB and CI Stationary RICE >500 HP Located at a Major Source of HAP Emissions, New and Reconstructed 4SLB Stationary RICE ≥250 HP Located at a Major Source of HAP Emissions |
| Table 2C | Requirements for Existing Stationary RICE Located at a Major Source of HAP Emissions, Existing CI Stationary RICE >500 HP |
| Table 2D | Requirements for的区别Stationary RICE Located at Area Sources of HAP Emissions |
| Table 3 | Subsequent Performance Tests |
| Table 4 | Performance Tests and Other Initial Compliance Demonstrations |
| Table 5 | Continuous Compliance with Emission Limitations, Operating Limitations, and Other Requirements |
| Table 6 | Periodic Monitoring for Compliance with Opacity and Visible Emissions Limits |
| Table 7 | Requirements for Reports |

### 63.7080 What is the purpose of this subpart?

- Emission Limitations

### 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?

### 63.7090 What emission limitations must I meet?
Environmental Protection Agency

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?
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 I TO SUBPART CCCCC OF PART 63—APPLICABILITY OF GENERAL PROVISIONS TO SUBPART CCCCC

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

WHAT THIS SUBPART COVERS

63.7400 What is the purpose of this subpart?
63.7405 Am I subject to this subpart?
63.7408 What is the affected source of this subpart?
63.7409 Are any boilers or process heaters not subject to this subpart?
63.7410 When do I have to comply with this subpart?

EMISSION LIMITATIONS AND WORK PRACTICE STANDARDS

63.7420 What are the subcategories of boilers and process heaters?
63.7425 What emission limitations, work practice standards, and operating limits must I meet?
63.7501 [Reserved]
Environmental Protection Agency

INPUT CAPACITY OF 10 MILLION BTU PER HOUR OR GREATER

Table 3 to Subpart DDDDD of Part 63—Work Practice Standards
Table 4 to Subpart DDDDD of Part 63—Operating Limits for Boilers and Process Heaters
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—Establishing Operating Limits
Table 8 to Subpart DDDDD of Part 63—Demonstrating Continuous Compliance
Table 9 to Subpart DDDDD of Part 63—Reporting Requirements
Table 10 to Subpart DDDDD of Part 63—Applicability of General Provisions to Subpart DDDDDD
Table 11 to Subpart DDDDD of Part 63—Alternative Emission Limits for New or Reconstructed Boilers and Process Heaters That Commenced Construction or Reconstruction After June 4, 2010, and Before May 20, 2011
Table 12 to Subpart DDDDD of Part 63—Alternative Emission Limits for New or Reconstructed Boilers and Process Heaters That Commenced Construction or Reconstruction After May 20, 2011, and Before December 23, 2011
Table 13 to Subpart DDDDD of Part 63—Alternative Emission Limits for New or Reconstructed Boilers and Process Heaters That Commenced Construction or Reconstruction After December 23, 2011, and Before April 1, 2013

Subpart EEEEE—National Emission Standards for Hazardous Air Pollutants for Iron and Steel Foundries

What This Subpart Covers

63.7880 What is the purpose of this subpart?
63.7881 Am I subject to this subpart?
63.7882 What parts of my foundry does this subpart cover?
63.7883 When do I have to comply with this subpart?

Emissions Limitations

63.7890 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 maintenance 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 performance tests or other initial compliance demonstrations?
63.7731 When must I conduct subsequent performance tests?
63.7732 What test methods and other procedures must I use to demonstrate initial compliance with the emissions limitations?
63.7733 What procedures must I use to establish operating limits?
63.7734 How do I demonstrate initial compliance with the emissions limitations that apply to me?
63.7735 How do I demonstrate initial compliance with the work practice standards that apply to me?
63.7736 How do I demonstrate initial compliance with the operation and maintenance requirements that apply to me?

Continuous Compliance Requirements

63.7740 What are my monitoring requirements?
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 limitations 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 maintenance requirements that apply to me?
63.7746 What other requirements must I meet to demonstrate continuous compliance?
63.7747 How do I apply for alternative monitoring 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 subpart?

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

Subpart FFFFF—National Emission Standards for Hazardous Air Pollutants for Integrated 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 FFFFF OF PART 63—EMISSION AND OPACITY LIMITS

TABLE 2 TO SUBPART FFFFF OF PART 63—INITIAL COMPLIANCE WITH EMISSION AND OPACITY LIMITS

TABLE 3 TO SUBPART FFFFF OF PART 63—CONTINUOUS COMPLIANCE WITH EMISSION AND OPACITY LIMITS

TABLE 4 TO SUBPART FFFFF OF PART 63—APPLICABILITY OF GENERAL PROVISIONS TO SUBPART FFFFF

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?
Environmental Protection Agency

**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?

**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—APPLICATION 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—REQUIREMENTS 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
Environmental Protection Agency

Table 8 to Subpart HHHH of Part 63—Soluble Hazardous Air Pollutants

Table 9 to Subpart HHHH of Part 63—Requirements for Reports

Table 10 to Subpart HHHH of Part 63—Applicability of General Provisions to Subpart HHHH

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?
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 JJJJJ—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 and Work Practice Standards

63.8405 What emission limitations and work practice standards must I meet?
63.8410 What are my options for meeting the emission limitations and work practice standards?

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 and work practice standards?

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 and work practice standards?

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?

Tables to Subpart JJJJJ of Part 63
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—Work Practice Standards
Table 4 to Subpart JJJJJ of Part 63—Requirements for Performance Tests
Table 5 to Subpart JJJJJ of Part 63—Initial Compliance with Emission Limitations and Work Practice Standards

Table 6 to Subpart JJJJJ of Part 63—Continuous Compliance with Emission Limitations and Work Practice Standards

Table 7 to Subpart JJJJJ of Part 63—Compliance Dates

Table 8 to Subpart JJJJJ of Part 63—Requirements for Notifications

Table 9 to Subpart JJJJJ of Part 63—Requirements for Reports

Table 10 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?
Environmental Protection Agency

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?

TABLES TO SUBPART KKKKK OF PART 63
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—Toxic Equivalency Factors
Table 6 to Subpart KKKKK of Part 63—Initial Compliance with Emission Limitations and Work Practice Standards
Table 7 to Subpart KKKKK of Part 63—Continuous Compliance with Emission Limitations and Work Practice Standards
Table 8 to Subpart KKKKK of Part 63—Compliance Dates
Table 9 to Subpart KKKKK of Part 63—Requirements for Notifications
Table 10 to Subpart KKKKK of Part 63—Requirements for Reports
Table 11 to Subpart KKKKK of Part 63—Applicability of General Provisions to Subpart KKKKK

Subpart LLLLL—National Emission Standards for Hazardous Air Pollutants: Asphalt Processing and Asphalt Roofing Manufacturing

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 subpart?

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 performance tests or other initial compliance demonstrations?
63.8687 What performance tests, design evaluations, and other procedures must I use?
63.8688 What are my monitoring installation, operation, and maintenance requirements?
63.8689 How do I demonstrate initial compliance 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 subpart?

TABLE 1 TO SUBPART LLLLL OF PART 63—EMISSION LIMITATIONS
TABLE 2 TO SUBPART LLLLL OF PART 63—OPERATING LIMITATIONS
TABLE 3 TO SUBPART LLLLL OF PART 63—REQUIREMENTS FOR PERFORMANCE TESTS
TABLE 4 TO SUBPART LLLLL OF PART 63—INITIAL COMPLIANCE WITH EMISSION LIMITATIONS
TABLE 5 TO SUBPART LLLLL OF PART 63—CONTINUOUS COMPLIANCE WITH OPERATING LIMITS
TABLE 6 TO SUBPART LLLLL OF PART 63—REQUIREMENTS FOR REPORTS
TABLE 7 TO SUBPART LLLLL OF PART 63—APPLICABILITY OF GENERAL PROVISIONS TO SUBPART LLLLL

Subpart MMMMMM—National Emission Standards for Hazardous Air Pollutants: Flexible Polyurethane Foam Fabrication 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?
§ 63.6580

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 performance tests or other initial compliance 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 demonstrate compliance with the emission limit for loop slitter adhesive use?

63.8806 How do I demonstrate initial compliance 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 limitations?

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 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 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) per year.
megagrams) or more per year, except that for oil and gas production facilities, a major source of HAP emissions is determined for each surface site.

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

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

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

(f) The emergency stationary RICE listed in paragraphs (f)(1) through (3) of this section are not subject to this subpart. The stationary RICE must meet the definition of an emergency stationary RICE in §63.6675, which includes operating according to the provisions specified in §63.6640(f).

1. Existing residential emergency stationary RICE located at an area source of HAP emissions that do not operate or are not contractually obligated to be available for more than 15 hours per calendar year for the purposes specified in §63.6640(f)(2)(ii) and (iii) and that do not operate for the purpose specified in §63.6640(f)(4)(ii).

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

(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.
§63.6590  40 CFR Ch. I (7–1–16 Edition)

(3) **Reconstructed stationary RICE.** (i) A stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions is reconstructed if you meet the definition of reconstruction in §63.2 and reconstruction is commenced on or after December 19, 2002.

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

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

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

(i) The stationary RICE is a new or reconstructed emergency stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions that does not operate or is not contractually obligated to be available for more than 15 hours per calendar year for the purposes specified in §63.6640(f)(2)(ii) and (iii).

(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.

(3) The following stationary RICE do not have to meet the requirements of this subpart and of subpart A of this part, including initial notification requirements:

(i) Existing spark ignition 2 stroke lean burn (2SLB) stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions;

(ii) Existing spark ignition 4 stroke lean burn (4SLB) stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions;

(iii) Existing emergency stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions that does not operate or is not contractually obligated to be available for more than 15 hours per calendar year for the purposes specified in §63.6640(f)(2)(ii) and (iii).

(iv) Existing limited use stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions;

(v) Existing stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions that combusts landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis;

(c) **Stationary RICE subject to Regulations under 40 CFR Part 60.** An affected source that meets any of the criteria in paragraphs (c)(1) through (7) of this section must meet the requirements of this part by meeting the requirements of 40 CFR part 60 subpart IIII, for compression ignition engines or 40 CFR part 60 subpart JJJJ, for spark ignition engines. No further requirements apply for such engines under this part.

(1) A new or reconstructed stationary RICE located at an area source;

(2) A new or reconstructed 2SLB stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions;

(3) A new or reconstructed 4SLB stationary RICE with a site rating of less than 250 brake HP located at a major source of HAP emissions;

(4) A new or reconstructed spark ignition 4 stroke rich burn (4SRB) stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions;
§ 63.6595 When do I have to comply with this subpart?

(a) Affected sources. (1) If you have an existing stationary RICE, excluding existing non-emergency CI stationary RICE, with a site rating of more than 500 brake HP located at a major source of HAP emissions, you must comply with the applicable emission limitations, operating limitations and other requirements no later than June 15, 2007. If you have an existing non-emergency CI stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions, or an existing stationary CI RICE located at an area source of HAP emissions, you must comply with the applicable emission limitations, operating limitations, and other requirements no later than May 3, 2013. If you have an existing stationary SI RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions, you must comply with the applicable emission limitations, operating limitations, and other requirements no later than October 19, 2013.

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

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

(4) If you start up your new or reconstructed stationary RICE 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.

(5) 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.

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

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

(a) If you own or operate a new or reconstructed 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 2a to this subpart which apply to you.

(b) If you own or operate an existing 2SLB or 4SLB stationary RICE with a site rating of greater than or equal to 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 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 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.

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

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

(78 FR 6701, Jan. 30, 2013)

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

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

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

(b) If you own or operate an existing stationary non-emergency CI RICE with a site rating of more than 300 HP located at an area source of HAP emissions that meets either paragraph (b)(1) or (2) of this section, you do not have to meet the numerical CO emission limitations specified in Table 2d of this subpart. Existing stationary non-emergency CI RICE with a site rating of more than 300 HP located at an area source of HAP that meet either paragraph (b)(1) or (2) of this section must meet the management practices that are shown for stationary non-emergency CI RICE with a site rating of less than or equal to 300 HP in Table 2d of this subpart.

1. The area source is located in an area of Alaska that is not accessible by the Federal Aid Highway System (FAHS).

2. The stationary RICE is located at an area source that meets paragraphs (b)(2)(i), (ii), and (iii) of this section.

   (i) The only connection to the FAHS is through the Alaska Marine Highway System (AMHS), or the stationary RICE operation is within an isolated grid in Alaska that is not connected to the statewide electrical grid referred to as the Alaska Railbelt Grid.

   (ii) At least 10 percent of the power generated by the stationary RICE on an annual basis is used for residential purposes.

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

(c) If you own or operate an existing stationary non-emergency CI RICE with a site rating of more than 300 HP located on an offshore vessel that is an area source of HAP and is a nonroad vehicle that is an Outer Continental Shelf (OCS) source as defined in 40 CFR 55.2, you do not have to meet the numerical CO emission limitations specified in Table 2d of this subpart. You must meet all of the following management practices:

   (1) Change oil every 1,000 hours of operation or annually, whichever comes first. Sources have the option to utilize an oil analysis program as described in §63.6625(i) in order to extend the specified oil change requirement.

   (2) Inspect and clean air filters every 750 hours of operation or annually, whichever comes first, and replace as necessary.

   (3) Inspect fuel filters and belts, if installed, every 750 hours of operation or annually, whichever comes first, and replace as necessary.

   (4) Inspect all flexible hoses every 1,000 hours of operation or annually, whichever comes first, and replace as necessary.

(d) If you own or operate an existing non-emergency CI RICE with a site rating of more than 300 HP located at an area source of HAP emissions that is
§ 63.6604 What fuel requirements must I meet if I own or operate a stationary CI RICE?

(a) If you own or operate an existing non-emergency, non-black start CI stationary RICE with a site rating of more than 300 brake HP with a displacement of less than 30 liters per cylinder that uses diesel fuel, you must use diesel fuel that meets the requirements in 40 CFR 80.510(b) for nonroad diesel fuel.

(b) Beginning January 1, 2015, if you own or operate a new emergency CI RICE with a site rating of more than 100 brake HP and a displacement of less than 30 liters per cylinder that uses diesel fuel and operates or is contractually obligated to be available for more than 15 hours per calendar year for the purposes specified in §63.6640(f)(2)(ii) and (iii) or that operates for the purpose specified in §63.6640(f)(4)(ii), you must use diesel fuel that meets the requirements in 40 CFR 80.510(b) for nonroad diesel fuel, except that any existing diesel fuel purchased (or otherwise obtained) prior to January 1, 2015, may be used until depleted.

(c) Beginning January 1, 2015, if you own or operate a new emergency CI RICE under this subpart, owners and operators of existing non-emergency SI 4SLB and 4SRB stationary RICE with a site rating of more than 500 HP located at area sources of HAP that meet the definition of remote stationary RICE in §63.6675 of this subpart as of October 19, 2013 must evaluate the status of their stationary RICE every 12 months. Owners and operators must keep records of the initial and annual evaluation of the status of the engine. If the evaluation indicates that the stationary RICE no longer meets the definition of remote stationary RICE in §63.6675 of this subpart, the owner or operator must comply with all of the requirements for existing non-emergency SI 4SLB and 4SRB stationary RICE with a site rating of more than 500 HP located at area sources of HAP that are not remote stationary RICE within 1 year of the evaluation.

Environmental Protection Agency

§ 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.

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

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

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

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

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

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

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

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

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

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

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

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

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

§ 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
(c) [Reserved]

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

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

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

Where:
- \( C_i \) = concentration of carbon monoxide (CO), total hydrocarbons (THC), or formaldehyde at the control device inlet,
- \( C_o \) = concentration of CO, THC, or formaldehyde at the control device outlet, and
- \( R \) = percent reduction of CO, THC, or formaldehyde emissions.

(2) You must normalize the CO, THC, or formaldehyde concentrations at the inlet and outlet of the control device to a dry basis and to 15 percent oxygen, or an equivalent percent carbon dioxide (CO\(_2\)). If pollutant concentrations are to be corrected to 15 percent oxygen and CO\(_2\) concentration is measured in lieu of oxygen concentration measurement, a CO\(_2\) correction factor is needed. Calculate the CO\(_2\) 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:

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

Where:
- \( F_o \) = Fuel factor based on the ratio of oxygen volume to the ultimate CO\(_2\) volume produced by the fuel at zero percent excess air.
- \( 0.209 \) = Fraction of air that is oxygen, percent/100.
- \( F_d \) = Ratio of the volume of dry effluent gas to the gross caloric value of the fuel from Method 19, \( \text{dm}^3/\text{J} \) (dscf/106 Btu).
- \( F_c \) = Ratio of the volume of CO\(_2\) produced to the gross caloric value of the fuel from Method 19, \( \text{dm}^3/\text{J} \) (dscf/106 Btu).

(ii) Calculate the CO\(_2\) correction factor for correcting measurement data to 15 percent O\(_2\), as follows:
(iii) Calculate the CO, THC, and formaldehyde gas concentrations adjusted to 15 percent O₂ using CO₂ as follows:

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

Where:
\[C_{\text{adj}} = \text{Calculated concentration of CO, THC, or formaldehyde adjusted to 15 percent O}_2\]
\[C_d = \text{Measured concentration of CO, THC, or formaldehyde, uncorrected.}\]
\[X_{\text{CO}_2} = \text{CO}_2 \text{ correction factor, percent.}\]
\[\%\text{CO}_2 = \text{Measured CO}_2 \text{ concentration measured, dry basis, percent.}\]

(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 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;

(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) 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.

Where:
\[X_{\text{CO}_2} = \text{CO}_2 \text{ correction factor, percent.}\]
\[5.9 = 20.9 \text{ percent O}_2 - 15 \text{ percent O}_2, \text{ the defined O}_2 \text{ correction value, percent.}\]
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, strain gauges, etc. are used, the model number of the measurement device, and an estimate of its accurate in percentage of true value must be provided.


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

(a) If you elect to install a CEMS as specified in Table 5 of this subpart, you must install, operate, and maintain a CEMS to monitor CO and either O₂ or CO₂ according to the requirements in paragraphs (a)(1) through (4) of this section. If you are meeting a requirement to reduce CO emissions, the CEMS must be installed at both the inlet and outlet of the control device. If you are meeting a requirement to limit the concentration of CO, the CEMS must be installed at the outlet of the control device.

(1) Each CEMS must be installed, operated, and maintained according to the applicable performance specifications of 40 CFR part 60, appendix B.

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

(3) As specified in §63.8(c)(4)(i), each CEMS must complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive 15-minute period. You must have at least two data points, with each representing a different 15-minute period, to have a valid hour of data.

(4) The CEMS data must be reduced as specified in §63.8(g)(2) and recorded in parts per million or parts per billion (as appropriate for the applicable limitation) at 15 percent oxygen or the equivalent CO₂ concentration.

(b) If you are required to install a continuous parameter monitoring system (CPMS) as specified in Table 5 of this subpart, you must install, operate, and maintain each CPMS according to the requirements in paragraphs (b)(1) through (6) of this section. For an affected source that is complying with the emission limitations and operating limitations on March 9, 2011, the requirements in paragraph (b) of this section are applicable September 6, 2011.

(1) You must prepare a site-specific monitoring plan that addresses the monitoring system design, data collection, and the quality assurance and quality control elements outlined in paragraphs (b)(1)(i) through (v) of this section and in §63.8(d). As specified in §63.8(d), you may request approval of monitoring system quality assurance and quality control procedures alternative to those specified in paragraphs (b)(1) through (6) of this section in your site-specific monitoring plan.

(i) The performance criteria and design specifications for the monitoring
system equipment, including the sample interface, detector signal analyzer, and data acquisition and calculations;

(ii) Sampling interface (e.g., thermocouple) location such that the monitoring system will provide representative measurements;

(iii) Equipment performance evaluations, system accuracy audits, or other audit procedures;

(iv) Ongoing operation and maintenance procedures in accordance with provisions in §63.8(c)(1)(ii) and (c)(3); and

(v) Ongoing reporting and record-keeping procedures in accordance with provisions in §63.10(c), (e)(1), and (e)(2)(i).

(2) You must install, operate, and maintain each CPMS in continuous operation according to the procedures in your site-specific monitoring plan.

(3) The CPMS must collect data at least once every 15 minutes (see also §63.6635).

(4) For a CPMS for measuring temperature range, the temperature sensor must have a minimum tolerance of 2.8 degrees Celsius (5 degrees Fahrenheit) or 1 percent of the measurement range, whichever is larger.

(5) You must conduct the CPMS equipment performance evaluation, system accuracy audits, or other audit procedures specified in your site-specific monitoring plan at least annually.

(6) You must conduct a performance evaluation of each CPMS in accordance with your site-specific monitoring plan.

(c) If you are operating a new or reconstructed stationary RICE which fires landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis, you must monitor and record your fuel usage daily with separate fuel meters to measure the volumetric flow rate of each fuel. In addition, you must operate your stationary RICE in a manner which reasonably minimizes HAP emissions.

(d) If you are operating a new or reconstructed emergency 4SLB stationary RICE with a site rating of greater than or equal to 250 and less than or equal to 500 brake HP located at a major source of HAP emissions, you must install a non-resettable hour meter prior to the startup of the engine.

(e) If you own or operate any of the following stationary RICE, you must operate and maintain the stationary RICE and after-treatment control device (if any) according to the manufacturer’s emission-related written instructions or develop your own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions:

(1) An existing stationary RICE with a site rating of less than 100 HP located at a major source of HAP emissions;

(2) An existing emergency or black start stationary RICE with a site rating of less than or equal to 500 HP located at a major source of HAP emissions;

(3) An existing emergency or black start stationary RICE located at an area source of HAP emissions;

(4) An existing non-emergency, non-black start stationary CI RICE with a site rating less than or equal to 300 HP located at an area source of HAP emissions;

(5) An existing non-emergency, non-black start 2SLB stationary RICE located at an area source of HAP emissions;

(6) An existing non-emergency, non-black start stationary RICE located at an area source of HAP emissions which combusts landfill or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis.

(7) An existing non-emergency, non-black start 4SLB stationary RICE with a site rating less than or equal to 500 HP located at an area source of HAP emissions;

(8) An existing non-emergency, non-black start 4SRB stationary RICE with a site rating less than or equal to 500 HP located at an area source of HAP emissions;

(9) An existing, non-emergency, non-black start 4SLB stationary RICE with a site rating greater than 500 HP located at an area source of HAP emissions that is operated 24 hours or less per calendar year; and

(10) An existing, non-emergency, non-black start 4SRB stationary RICE with
Environmental Protection Agency

§ 63.6625

(a) If you own or operate a stationary CI engine that is subject to the work, operation or management practices in items 1 or 2 of Table 2c to this subpart or in items 1 or 4 of Table 2d to this subpart, you have the option of utilizing an oil analysis program in order to extend the specified oil 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 any of these condemning limits are exceeded, the engine owner or operator must change the oil. If any of the limits are exceeded, the engine owner or operator must change the oil within 2 business days of receiving the results of the analysis; if the engine is not in operation when the results of the analysis are received, the engine owner or operator must change the oil between 2 business days of receiving the results of the analysis, or before commencing operation, whichever is later. The owner or operator must keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for the engine. The analysis program must be part of the maintenance plan for the engine.

(j) If you own or operate a stationary SI engine that is subject to the work, operation or management practices in items 6, 7, or 8 of Table 2c to this subpart or in items 5, 6, 7, 9, or 11 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 Acid Number, viscosity, and percent water content.
content. The condemning limits for these parameters are as follows: Total Acid Number increases by more than 3.0 milligrams of potassium hydroxide (KOH) per gram from Total Acid Number of the oil when new; viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new; or percent water content (by volume) is greater than 0.5. If all of these condemning limits are not exceeded, the engine owner or operator is not required to change the oil. If any of the limits are exceeded, the engine owner or operator must change the oil within 2 business days of receiving the results of the analysis; if the engine is not in operation when the results of the analysis are received, the engine owner or operator must change the oil within 2 business days or before commencing operation, whichever is later. The owner or operator must keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for the engine. The analysis program must be part of the maintenance plan for the engine.

(g) The initial compliance demonstration required for existing non-emergency 4SLB and 4SRB stationary RICE with a site rating of more than 500 HP located at an area source of HAP that are not remote stationary RICE and that are operated more than 24 hours per calendar year must be conducted according to the following requirements:

1. The compliance demonstration must consist of at least three test runs.
2. Each test run must be of at least 15 minute duration, except that each test conducted using the method in appendix A to this subpart must consist of at least one measurement cycle and include at least 2 minutes of test data phase measurement.
3. If you are demonstrating compliance with the CO concentration or CO percent reduction requirement, you must measure CO emissions using one of the CO measurement methods specified in Table 4 of this subpart, or using appendix A to this subpart.

4. If you are demonstrating compliance with the THC percent reduction requirement, you must measure THC emissions using Method 25A, reported as propane, of 40 CFR part 60, appendix A.

5. You must measure O_2 using one of the O_2 measurement methods specified in Table 4 of this subpart. Measurements to determine O_2 concentration must be made at the same time as the measurements for CO or THC concentration.

6. If you are demonstrating compliance with the CO or THC percent reduction requirement, you must measure CO or THC emissions and O_2 emissions simultaneously at the inlet and outlet of the control device.
Environmental Protection Agency § 63.6640

CONTINUOUS COMPLIANCE REQUIREMENTS

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

(a) If you must comply with emission and operating limitations, you must monitor and collect data according to this section.

(b) Except for monitor malfunctions, associated repairs, required performance evaluations, and required quality assurance or control activities, you must monitor continuously at all times that the stationary RICE is operating. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions.

(c) You may not use data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities in data averages and calculations used to report emission or operating levels. You must, however, use all the valid data collected during all other periods.

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

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

(a) You must demonstrate continuous compliance with each emission limitation, operating limitation, and other requirements in Tables 1a and 1b, Tables 2a and 2b, Table 2c, and Table 2d to this subpart that apply to you according to methods specified in Table 6 to this subpart.

(b) You must report each instance in which you did not meet each emission limitation or operating limitation in Tables 1a and 1b, Tables 2a and 2b, Table 2c, and Table 2d to this subpart that apply to you. These instances are deviations from the emission and operating limitations in this subpart. These deviations must be reported according to the requirements in §63.6650. If you change your catalyst, you must reestablish the values of your operating parameters measured during the initial performance test. When you reestablish the values of your operating parameters, you must also conduct a performance test to demonstrate that you are meeting the required emission limitation applicable to your stationary RICE.

(c) The annual compliance demonstration required for existing non-emergency 4SLB and 4SRB stationary RICE with a site rating of more than 500 HP located at an area source of HAP that are not remote stationary RICE and that are operated more than 24 hours per calendar year must be conducted according to the following requirements:

(1) The compliance demonstration must consist of at least one test run.

(2) Each test run must be of at least 15 minute duration, except that each test conducted using the method in appendix A to this subpart must consist of at least one measurement cycle and include at least 2 minutes of test data phase measurement.

(3) If you are demonstrating compliance with the CO concentration or CO percent reduction requirement, you must measure CO emissions using one of the CO measurement methods specified in Table 4 of this subpart, or using appendix A to this subpart.

(4) If you are demonstrating compliance with the THC percent reduction requirement, you must measure THC emissions using Method 25A, reported as propane, of 40 CFR part 60, appendix A.

(5) You must measure O₂ using one of the O₂ measurement methods specified in Table 4 of this subpart. Measurements to determine O₂ concentration must be made at the same time as the measurements for CO or THC concentration.

(6) If you are demonstrating compliance with the CO or THC percent reduction requirement, you must measure CO or THC emissions and O₂ emissions simultaneously at the inlet and outlet of the control device.

(7) If the results of the annual compliance demonstration show that the emissions exceed the levels specified in Table 6 of this subpart, the stationary RICE must be shut down as soon as safely possible, and appropriate corrective action must be taken (e.g., repairs,
catalyst cleaning, catalyst replacement). The stationary RICE must be retested within 7 days of being restarted and the emissions must meet the levels specified in Table 6 of this subpart. If the retest shows that the emissions continue to exceed the specified levels, the stationary RICE must again be shut down as soon as safely possible, and the stationary RICE may not operate, except for purposes of startup and testing, until the owner/operator demonstrates through testing that the emissions do not exceed the levels specified in Table 6 of this subpart.

(d) For new, reconstructed, and rebuilt stationary RICE, deviations from the emission or operating limitations that occur during the first 200 hours of operation from engine startup (engine burn-in period) are not violations. Rebuilt stationary RICE means a stationary RICE that has been rebuilt as that term is defined in 40 CFR 94.11(a).

(e) You must also report each instance in which you did not meet the requirements in Table 8 to this subpart that apply to you. If you own or operate a new or reconstructed stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions (except new or reconstructed 4SLB engines greater than or equal to 250 and less than or equal to 500 brake HP), a new or reconstructed stationary RICE located at an area source of HAP emissions, or any of the following RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, you do not need to comply with the requirements in Table 8 to this subpart that apply to you. 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 combuts landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis, a new or reconstructed emergency stationary RICE, or a new or reconstructed limited use stationary RICE.

(f) If you own or operate an emergency stationary RICE, you must operate the emergency stationary RICE according to the requirements in paragraphs (f)(1) through (4) of this section. In order for the engine to be considered an emergency stationary RICE under this subpart, any operation other than emergency operation, maintenance and testing, emergency demand response, and operation in non-emergency situations for 50 hours per year, as described in paragraphs (f)(1) through (4) of this section, is prohibited. If you do not operate the engine according to the requirements in paragraphs (f)(1) through (4) of this section, the engine will not be considered an emergency engine under this subpart and must meet all requirements for non-emergency engines.

1. There is no time limit on the use of emergency stationary RICE in emergency situations.

2. You may operate your emergency stationary RICE for any combination of the purposes specified in paragraphs (f)(2)(i) through (iii) of this section for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by paragraphs (f)(3) and (4) of this section counts as part of the 100 hours per calendar year allowed by this paragraph (f)(2).

(i) Emergency stationary RICE may be operated for maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that federal, state, or local standards require maintenance and
[Environmental Protection Agency](#) § 63.6645

testing of emergency RICE beyond 100 hours per calendar year.

(ii) Emergency stationary RICE may be operated for emergency demand response for periods in which the Reliability Coordinator under the North American Electric Reliability Corporation (NERC) Reliability Standard EOP-002-3, Capacity and Energy Emergencies (incorporated by reference, see §63.14), or other authorized entity as determined by the Reliability Coordinator, has declared an Energy Emergency Alert Level 2 as defined in the NERC Reliability Standard EOP–002-3.

(iii) Emergency stationary RICE may be operated for periods where there is a deviation of voltage or frequency of 5 percent or greater below standard voltage or frequency.

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

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

(i) Prior to May 3, 2014, the 50 hours per year for non-emergency situations can be used for peak shaving or non-emergency demand response to generate income for a facility, or to otherwise supply power as part of a financial arrangement with another entity if the engine is operated as part of a peak shaving (load management program) with the local distribution system operator and the power is provided only to the facility itself or to support the local distribution system.

(ii) The 50 hours per year for non-emergency situations can be used to supply power as part of a financial arrangement with another entity if all of the following conditions are met:

(A) The engine is dispatched by the local balancing authority or local transmission and distribution system operator.

(B) The dispatch is intended to mitigate local transmission and/or distribution limitations so as to avert potential voltage collapse or line overloads that could lead to the interruption of power supply in a local area or region.

(C) The dispatch follows reliability, emergency operation or similar protocols that follow specific NERC, regional, state, public utility commission or local standards or guidelines.

(D) The power is provided only to the facility itself or to support the local transmission and distribution system.

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


§ 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:
§ 63.6645  40 CFR Ch. I (7–1–16 Edition)

(1) An existing stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions.

(2) An existing stationary RICE located at an area source of HAP emissions.

(3) A stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions.

(4) A new or reconstructed 4SLB stationary RICE with a site rating of greater than or equal to 250 HP located at a major source of HAP emissions.

(5) This requirement does not apply if you own or operate an existing stationary RICE less than 100 HP, an existing stationary emergency RICE, or an existing stationary RICE that is not subject to any numerical emission standards.

(b) As specified in § 63.9(b)(2), if you start up your stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions before the effective date of this subpart, you must submit an Initial Notification not later than December 13, 2004.

(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).

(i) If you own or operate an existing non-emergency CI RICE with a site rating of more than 300 HP located at an area source of HAP emissions that is certified to the Tier 1 or Tier 2 emission standards in Table 1 of 40 CFR 89.112 and subject to an enforceable state or local standard requiring engine replacement and you intend to meet management practices rather than emission limits, as specified in § 63.6603(d), you must submit a notification by March 3, 2013, stating that you intend to use the provision in § 63.6603(d) and identifying the state or...
§ 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 semiannual reporting period.

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)(ii)(A) or 40 CFR 71.6 (a)(3)(ii)(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
§ 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 §63.6655(b), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment.
§ 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).


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 equipment to its normal or usual manner of operation.

(b) For each CEMS or CPMS, you must keep the records listed in paragraphs (b)(1) through (3) of this section.

(1) Records described in § 63.10(b)(2)(vi) through (xl).

(2) Previous (i.e., superseded) versions of the performance evaluation plan as required in § 63.8(d)(3).

(3) Requests for alternatives to the relative accuracy test for CEMS or CPMS as required in § 63.8(f)(6)(i), if applicable.

(c) If you are operating a new or reconstructed stationary RICE which fires landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis, you must keep the records of your daily fuel usage monitors.

(d) You must keep the records required in Table 6 of this subpart to show continuous compliance with each emission or operating limitation that applies to you.

(e) You must keep records of the maintenance conducted on the stationary RICE in order to demonstrate that you operated and maintained the stationary RICE and after-treatment control device (if any) according to your own maintenance plan if you own or operate any of the following stationary RICE:

(1) An existing stationary RICE with a site rating of less than 100 brake HP located at a major source of HAP emissions.

(2) An existing stationary emergency RICE.

(3) An existing stationary RICE located at an area source of HAP emissions subject to management practices as shown in Table 2d to this subpart.

(f) If you own or operate any of the stationary RICE in paragraphs (f)(1) through (2) of this section, you must keep records of the hours of operation of the engine that is recorded through the non-resettable hour meter. The owner or operator must document how many hours are spent for emergency operation, including what classified the operation as emergency and how many hours are spent for non-emergency operation. If the engine is used for the purposes specified in § 63.6640(f)(2)(ii) or (iii) or
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 combuts 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 §63.66(g).

(2) Approval of major alternatives to test methods under §63.7(e)(2)(i) 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:

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

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

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

Backup power for renewable energy means an engine that provides backup power to a facility that generates electricity from renewable energy sources, as that term is defined in Alaska Statute 42.45.045(1)(5) (incorporated by reference, see §63.14).

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

CAA means the Clean Air Act (42 U.S.C. 7401 et seq., as amended by Public Law 101–549, 104 Stat. 2339).

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

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

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

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

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

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

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

Digester gas means any gaseous by-product of wastewater treatment typically formed through the anaerobic decomposition of organic waste materials and composed principally of methane and CO₂.

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

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

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

Engine startup means the time from initial start until applied load and engine and associated equipment reaches steady state or normal operation. For
section 112(b) of the CAA.

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

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

Landfill gas means a gaseous by-product of the land application of municipal refuse typically formed through the anaerobic decomposition of waste materials and composed principally of methane and CO₂.

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

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

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

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

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

1) Emissions from any oil or gas exploration or production well (with its associated equipment (as defined in this section)) and emissions from any pipeline compressor station or pump station shall not be aggregated with emissions from other similar units, to determine whether such emission points or stations are major sources, even when emission points are in a contiguous area or under common control;

2) For oil and gas production facilities, emissions from processes, operations, or equipment that are not part of the same oil and gas production facility, as defined in §63.1271 of subpart HHH of this part, shall not be aggregated;

3) For production field facilities, only HAP emissions from glycol dehydration units, storage vessel with the potential for flash emissions, combustion turbines and reciprocating internal combustion engines shall be aggregated for a major source determination; and

4) Emissions from processes, operations, and equipment that are not part of the same natural gas transmission and storage facility, as defined in §63.1271 of subpart HHH of this part, shall not be aggregated.

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

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

Non-selective catalytic reduction (NSCR) means an add-on catalytic nitrogen oxides (NO\textsubscript{X}) control device for rich burn engines that, in a two-step reaction, promotes the conversion of excess oxygen, NO\textsubscript{X}, CO, and volatile organic compounds (VOC) into CO\textsubscript{2}, 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 lease tracts, surface lease areas, 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\textsubscript{3}H\textsubscript{8}.

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

1. Stationary RICE located in an offshore area that is beyond the line of ordinary low water along that portion of the coast of the United States that is in direct contact with the open seas.
and beyond the line marking the seaward limit of inland waters.

(2) Stationary RICE located on a pipeline segment that meets both of the criteria in paragraphs (2)(i) and (ii) of this definition.

(i) A pipeline segment with 10 or fewer buildings intended for human occupancy and no buildings with four or more stories within 220 yards (200 meters) on either side of the centerline of any continuous 1-mile (1.6 kilometers) length of pipeline. Each separate dwelling unit in a multiple dwelling unit building is counted as a separate building intended for human occupancy.

(ii) The pipeline segment does not lie within 100 yards (91 meters) of either a building or a small, well-defined outside area (such as a playground, recreation area, outdoor theater, or other place of public assembly) that is occupied by 20 or more persons on at least 5 days a week for 10 weeks in any 12-month period. The days and weeks need not be consecutive. The building or area is considered occupied for a full day if it is occupied for any portion of the day.

(iii) For purposes of this paragraph (2), the term pipeline segment means all parts of those physical facilities through which gas moves in transportation, including but not limited to pipe, valves, and other appurtenance attached to pipe, compressor units, metering stations, regulator stations, delivery stations, holders, and fabricated assemblies. Stationary RICE located within 50 yards (46 meters) of either a building or a small, well-defined outside area (such as a playground, recreation area, outdoor theater, or other place of public assembly) that is occupied by 20 or more persons on at least 5 days a week for 10 weeks in any 12-month period. The days and weeks need not be consecutive. The building or area is considered occupied for a full day if it is occupied for any portion of the day.

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

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

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

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

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

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

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

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

\textit{Stoichiometric} means the theoretical air-to-fuel ratio required for complete combustion.

\textit{Storage vessel with the potential for flash emissions} means any storage vessel that contains a hydrocarbon liquid with a stock tank gas-to-oil ratio equal to or greater than 0.31 cubic meters per liter and an American Petroleum Institute gravity equal to or greater than 40 degrees and an actual annual average hydrocarbon liquid throughput equal to or greater than 79,500 liters per day. Flash emissions occur when dissolved hydrocarbons in the fluid evolve from solution when the fluid pressure is reduced.

\textit{Subpart} means 40 CFR part 63, subpart ZZZZ.

\textit{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.

\textit{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.


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

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

<table>
<thead>
<tr>
<th>For each . . .</th>
<th>You must meet the following emission limitation, except during periods of startup . . .</th>
<th>During periods of startup you must . . .</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. 4SRB stationary RICE.</td>
<td>a. Reduce formaldehyde emissions by 76 percent or more. If you commenced construction or reconstruction before December 19, 2002 and June 15, 2004, you may reduce formaldehyde emissions by 75 percent or more until June 15, 2007 or.</td>
<td>Minimize the engine’s time spent at idle and minimize the engine’s startup time at startup to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the non-startup emission limitations apply.¹</td>
</tr>
<tr>
<td></td>
<td>b. Limit the concentration of formaldehyde in the stationary RICE exhaust to 350 ppbVD or less at 15 percent O₂.</td>
<td></td>
</tr>
</tbody>
</table>

¹ Sources can petition the Administrator pursuant to the requirements of 40 CFR 63.6(g) for alternative work practices.

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

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

For each . . . You must meet the following operating limitation, except during periods of startup . . .

1. existing, new and reconstructed 4SRB stationary RICE >500 HP located at a major source of HAP emissions complying with the requirement to reduce formaldehyde emissions by 76 percent or more (or by 75 percent or more, if applicable) and using NSCR; or existing, new and reconstructed 4SRB stationary RICE >500 HP located at a major source of HAP emissions complying with the requirement to limit the concentration of formaldehyde in the stationary RICE exhaust to 350 ppbvd or less at 15 percent O₂ and using NSCR:
   a. maintain your catalyst so that the pressure drop across the catalyst does not change by more than 2 inches of water at 100 percent load plus or minus 10 percent from the pressure drop across the catalyst measured during the initial performance test; and
   b. maintain the temperature of your stationary RICE exhaust so that the catalyst inlet temperature is greater than or equal to 750 °F and less than or equal to 1250 °F.¹

2. existing, new and reconstructed 4SRB stationary RICE >500 HP located at a major source of HAP emissions complying with the requirement to reduce formaldehyde emissions by 76 percent or more (or by 75 percent or more, if applicable) and not using NSCR; or existing, new and reconstructed 4SRB stationary RICE >500 HP located at a major source of HAP emissions complying with the requirement to limit the concentration of formaldehyde in the stationary RICE exhaust to 350 ppbvd or less at 15 percent O₂ and not using NSCR:

Comply with any operating limitations approved by the Administrator.

¹ Sources can petition the Administrator pursuant to the requirements of 40 CFR 63.8(f) for a different temperature range.

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 O₂. 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 O₂ until June 15, 2007.

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 O₂.

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 O₂.

¹ Sources can petition the Administrator pursuant to the requirements of 40 CFR 63.6(g) for alternative work practices.

[75 FR 9680, Mar. 3, 2010]
TABLE 2b TO SUBPART ZZZZ OF PART 63—OPERATING LIMITATIONS FOR NEW AND RECONSTRUCTED 2SLB AND CI STATIONARY RICE >500 HP LOCATED AT A MAJOR SOURCE OF HAP EMISSIONS, NEW AND RECONSTRUCTED 4SLB STATIONARY RICE ≥250 HP LOCATED AT A MAJOR SOURCE OF HAP EMISSIONS, EXISTING CI STATIONARY RICE >500 HP

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

<table>
<thead>
<tr>
<th>For each . . .</th>
<th>You must meet the following operating limitation, except during periods of startup . . .</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. New and reconstructed 2SLB and CI stationary RICE &gt;500 HP located at a major source of HAP emissions and new and reconstructed 4SLB stationary RICE ≥250 HP located at a major source of HAP emissions complying with the requirement to reduce CO emissions and using an oxidation catalyst; and New and reconstructed 2SLB and CI stationary RICE &gt;500 HP located at a major source of HAP emissions and new and reconstructed 4SLB stationary RICE ≥250 HP located at a major source of HAP emissions complying with the requirement to limit the concentration of formaldehyde in the stationary RICE exhaust and using an oxidation catalyst.</td>
<td>a. maintain your catalyst so that the pressure drop across the catalyst does not change by more than 2 inches of water at 100 percent load plus or minus 10 percent from the pressure drop across the catalyst that was measured during the initial performance test; and b. maintain the temperature of your stationary RICE exhaust so that the catalyst inlet temperature is greater than or equal to 450 °F and less than or equal to 1350 °F.1</td>
</tr>
<tr>
<td>2. Existing CI stationary RICE &gt;500 HP complying with the requirement to limit or reduce the concentration of CO in the stationary RICE exhaust and using an oxidation catalyst.</td>
<td>a. maintain your catalyst so that the pressure drop across the catalyst does not change by more than 2 inches of water from the pressure drop across the catalyst that was measured during the initial performance test; and b. maintain the temperature of your stationary RICE exhaust so that the catalyst inlet temperature is greater than or equal to 450 °F and less than or equal to 1350 °F.1</td>
</tr>
<tr>
<td>3. New and reconstructed 2SLB and CI stationary RICE &gt;500 HP located at a major source of HAP emissions and new and reconstructed 4SLB stationary RICE ≥250 HP located at a major source of HAP emissions complying with the requirement to reduce CO emissions and not using an oxidation catalyst; and New and reconstructed 2SLB and CI stationary RICE &gt;500 HP located at a major source of HAP emissions and new and reconstructed 4SLB stationary RICE ≥250 HP located at a major source of HAP emissions complying with the requirement to limit the concentration of formaldehyde in the stationary RICE exhaust and not using an oxidation catalyst; and existing CI stationary RICE &gt;500 HP complying with the requirement to limit or reduce the concentration of CO in the stationary RICE exhaust and not using an oxidation catalyst.</td>
<td>Comply with any operating limitations approved by the Administrator.</td>
</tr>
</tbody>
</table>

1 Sources can petition the Administrator pursuant to the requirements of 40 CFR 63.8(f) for a different temperature range.

[78 FR 6707, Jan. 30, 2013]
As stated in §§63.6600, 63.6602, and 63.6640, you must comply with the following requirements for existing compression ignition stationary RICE located at a major source of HAP emissions and existing spark ignition stationary RICE ≤500 HP located at a major source of HAP emissions:

<table>
<thead>
<tr>
<th>For each</th>
<th>You must meet the following requirement, except during periods of startup</th>
<th>During periods of startup you must . . .</th>
</tr>
</thead>
</table>
| 1. Emergency stationary CI RICE and black start stationary CI RICE | a. Change oil and filter every 500 hours of operation or annually, whichever comes first. 
   b. Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first, and replace as necessary. 
   c. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary. | Minimize the engine's time spent at idle and minimize the engine's startup time at startup to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the non-startup emission limitations apply. |
| 2. Non-Emergency, non-black start stationary CI RICE <100 HP | a. Change oil and filter every 1,000 hours of operation or annually, whichever comes first. 
   b. Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first, and replace as necessary. 
   c. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary. | |
| 3. Non-Emergency, non-black start CI stationary RICE 100≤HP<300 HP | | |
| 4. Non-Emergency, non-black start CI stationary RICE 300≤HP<500 | a. Limit concentration of CO in the stationary RICE exhaust to 230 ppmvd or less at 15 percent O<sub>2</sub>. | |
| 5. Non-Emergency, non-black start stationary CI RICE >500 HP | a. Limit concentration of CO in the stationary RICE exhaust to 23 ppmvd or less at 15 percent O<sub>2</sub>. 
   b. Reduce CO emissions by 70 percent or more. | |
| 6. Emergency stationary SI RICE and black start stationary SI RICE | a. Change oil and filter every 500 hours of operation or annually, whichever comes first. 
   b. Inspect spark plugs every 1,000 hours of operation or annually, whichever comes first, and replace as necessary. 
   c. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary. | |
| 7. Non-Emergency, non-black start stationary SI RICE <100 HP that are not 2SLB stationary RICE | a. Change oil and filter every 1,440 hours of operation or annually, whichever comes first. 
   b. Inspect spark plugs every 1,440 hours of operation or annually, whichever comes first, and replace as necessary. 
   c. Inspect all hoses and belts every 1,440 hours of operation or annually, whichever comes first, and replace as necessary. | |
| 8. Non-Emergency, non-black start 2SLB stationary SI RICE <100 HP | a. Change oil and filter every 4,320 hours of operation or annually, whichever comes first. 
   b. Inspect spark plugs every 4,320 hours of operation or annually, whichever comes first, and replace as necessary. | |
For each . . . | You must meet the following requirement, except during periods of startup . . . | During periods of startup you must . . .
---|---|---
9. Non-emergency, non-black start 2SLB stationary RICE 100<HP≤500. | c. Inspect all hoses and belts every 4,320 hours of operation or annually, whichever comes first, and replace as necessary.\(^3\) | 
10. Non-emergency, non-black start 4SLB stationary RICE 100<HP≤500. | Limit concentration of CO in the stationary RICE exhaust to 225 ppmvd or less at 15 percent \(O_2\). | 
11. Non-emergency, non-black start 4SRB stationary RICE 100<HP≤500. | Limit concentration of formaldehyde in the stationary RICE exhaust to 10.3 ppmvd or less at 15 percent \(O_2\). | 
12. Non-emergency, non-black start stationary RICE 100<HP≤500 which combusts landfill or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis. | Limit concentration of CO in the stationary RICE exhaust to 177 ppmvd or less at 15 percent \(O_2\). | 

\(^1\) If an emergency engine is operating during an emergency and it is not possible to shut down the engine in order to perform the work practice requirements on the schedule required in Table 2c of this subpart, or if performing the work practice on the required schedule would otherwise pose an unacceptable risk under federal, state, or local law, the work practice can be delayed until the emergency is over or the unacceptable risk under federal, state, or local law has abated. Sources must report any failure to perform the work practice on the schedule required and the federal, state or local law under which the risk was deemed unacceptable.

\(^2\) Sources have the option to utilize an oil analysis program as described in §63.6625(i) or (j) in order to extend the specified oil change requirement in Table 2c of this subpart.

\(^3\) Sources can petition the Administrator pursuant to the requirements of 40 CFR 63.6(g) for alternative work practices.

(78 FR 6708, Jan. 30, 2013, as amended at 78 FR 14457, Mar. 6, 2013)

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

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

For each . . . | You must meet the following requirement, except during periods of startup . . . | During periods of startup you must . . .
---|---|---
1. Non-Emergency, non-black start CI stationary RICE ≤300 HP. | a. Change oil and filter every 1,000 hours of operation or annually, whichever comes first.\(^1\) | 
b. Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first, and replace as necessary; 
c. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary. | Minimize the engine’s time spent at idle and minimize the engine’s startup time at startup to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the non-startup emission limitations apply. | 
2. Non-Emergency, non-black start CI stationary RICE 300<HP≤500. | a. Limit concentration of CO in the stationary RICE exhaust to 49 ppmvd at 15 percent \(O_2\); or 
b. Reduce CO emissions by 70 percent or more. | 
3. Non-Emergency, non-black start CI stationary RICE >500 HP. | a. Limit concentration of CO in the stationary RICE exhaust to 23 ppmvd at 15 percent \(O_2\); or 
b. Reduce CO emissions by 70 percent or more. | 
4. Emergency stationary CI RICE and black start stationary CI RICE.\(^2\) | a. Change oil and filter every 500 hours of operation or annually, whichever comes first.\(^1\) | 
b. Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first, and replace as necessary; and 
c. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary. |
For each . . . You must meet the following requirement, except during periods of startup . . . During periods of startup you must . . .

<table>
<thead>
<tr>
<th>5. Emergency stationary SI RICE; black start stationary SI RICE; non-emergency, non-black start 4SLB stationary RICE &gt;500 HP that operate 24 hours or less per calendar year; non-emergency, non-black start 4SRB stationary RICE &gt;500 HP that operate 24 hours or less per calendar year.</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Change oil and filter every 500 hours of operation or annually, whichever comes first;1</td>
</tr>
<tr>
<td>b. Inspect spark plugs every 1,000 hours of operation or annually, whichever comes first, and replace as necessary; and</td>
</tr>
<tr>
<td>c. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>6. Non-emergency, non-black start 2SLB stationary RICE.</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Change oil and filter every 1,440 hours of operation or annually, whichever comes first;1</td>
</tr>
<tr>
<td>b. Inspect spark plugs every 1,440 hours of operation or annually, whichever comes first, and replace as necessary; and</td>
</tr>
<tr>
<td>c. Inspect all hoses and belts every 1,440 hours of operation or annually, whichever comes first, and replace as necessary.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>7. Non-emergency, non-black start 4SLB stationary RICE ≤500 HP.</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Change oil and filter every 1,440 hours of operation or annually, whichever comes first;1</td>
</tr>
<tr>
<td>b. Inspect spark plugs every 1,440 hours of operation or annually, whichever comes first, and replace as necessary; and</td>
</tr>
<tr>
<td>c. Inspect all hoses and belts every 1,440 hours of operation or annually, whichever comes first, and replace as necessary.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>8. Non-emergency, non-black start 4SLB remote stationary RICE &gt;500 HP.</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Change oil and filter every 2,160 hours of operation or annually, whichever comes first;1</td>
</tr>
<tr>
<td>b. Inspect spark plugs every 2,160 hours of operation or annually, whichever comes first, and replace as necessary; and</td>
</tr>
<tr>
<td>c. Inspect all hoses and belts every 2,160 hours of operation or annually, whichever comes first, and replace as necessary.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>9. Non-emergency, non-black start 4SLB stationary RICE &gt;500 HP that are not remote stationary RICE and that operate more than 24 hours per calendar year.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Install an oxidation catalyst to reduce HAP emissions from the stationary RICE.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>10. Non-emergency, non-black start 4SRB stationary RICE ≤500 HP.</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Change oil and filter every 1,440 hours of operation or annually, whichever comes first;1</td>
</tr>
<tr>
<td>b. Inspect spark plugs every 1,440 hours of operation or annually, whichever comes first, and replace as necessary; and</td>
</tr>
<tr>
<td>c. Inspect all hoses and belts every 1,440 hours of operation or annually, whichever comes first, and replace as necessary.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>11. Non-emergency, non-black start 4SRB remote stationary RICE &gt;500 HP.</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Change oil and filter every 2,160 hours of operation or annually, whichever comes first;1</td>
</tr>
<tr>
<td>b. Inspect spark plugs every 2,160 hours of operation or annually, whichever comes first, and replace as necessary; and</td>
</tr>
<tr>
<td>c. Inspect all hoses and belts every 2,160 hours of operation or annually, whichever comes first, and replace as necessary.</td>
</tr>
</tbody>
</table>
For each . . . You must meet the following requirement, except during periods of startup. . . . During periods of startup you must . . .

<table>
<thead>
<tr>
<th>Requirement</th>
</tr>
</thead>
<tbody>
<tr>
<td>12. Non-emergency, non-black start 4SRB stationary RICE &gt;500 HP that are not remote stationary RICE and that operate more than 24 hours per calendar year.</td>
</tr>
<tr>
<td>13. Non-emergency, non-black start stationary RICE which combusts landfill or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis.</td>
</tr>
</tbody>
</table>

1 Sources have the option to utilize an oil analysis program as described in §63.6625(i) or (j) in order to extend the specified oil change requirement in Table 2d of this subpart.

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

(78 FR 6709, Jan. 30, 2013)

**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:

<table>
<thead>
<tr>
<th>Requirement</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. New or reconstructed 2SLB stationary RICE &gt;500 HP located at major sources; new or reconstructed 4SLB stationary RICE ≥250 HP located at major sources; and new or reconstructed CI stationary RICE &gt;500 HP located at major sources.</td>
</tr>
<tr>
<td>2. 4SRB stationary RICE ≥5,000 HP located at major sources.</td>
</tr>
<tr>
<td>3. Stationary RICE &gt;500 HP located at major sources and new or reconstructed 4SLB stationary RICE ≥250 HP located at major sources.</td>
</tr>
<tr>
<td>4. Existing non-emergency, non-black start CI stationary RICE &gt;500 HP that are not limited use stationary RICE.</td>
</tr>
<tr>
<td>5. Existing non-emergency, non-black start CI stationary RICE &gt;500 HP that are limited use stationary RICE.</td>
</tr>
<tr>
<td>6. Limit or reduce CO emissions and not using a CEMS.</td>
</tr>
<tr>
<td>7. Limit or reduce CO emissions and not using a CEMS.</td>
</tr>
</tbody>
</table>

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

(78 FR 6711, Jan. 30, 2013)
### Table 4 to Subpart ZZZZ of Part 63—Requirements for Performance Tests

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

<table>
<thead>
<tr>
<th>For each . . .</th>
<th>Complying with the requirement to . . .</th>
<th>You must . . .</th>
<th>Using . . .</th>
<th>According to the following requirements . . .</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. 2SLB, 4SLB, and CI stationary RICE.</td>
<td>a. reduce CO emissions.</td>
<td>i. Select the sampling port location and the number/location of traverse points at the inlet and outlet of the control device; and</td>
<td>(a) For CO and O&lt;sub&gt;2&lt;/sub&gt; measurement, ducts &lt;6 inches in diameter may be sampled at a single point located at the duct centroid and ducts &gt;6 and ≤12 inches in diameter may be sampled at 3 traverse points located at 16.7, 50.0, and 83.3% of the measurement line (‘3-point long line’). If the duct is &gt;12 inches in diameter and the sampling port location meets the two and half-diameter criterion of Section 11.1.1 of Method 1 of 40 CFR part 60, appendix A–1, the duct may be sampled at ‘3-point long line’; otherwise, conduct the stratification testing and select sampling points according to Section 8.1.2 of Method 7E of 40 CFR part 60, appendix A–4.</td>
<td>(b) Measurements to determine O&lt;sub&gt;2&lt;/sub&gt; concentration must be at 15 percent O&lt;sub&gt;2&lt;/sub&gt;, dry basis.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(1) Method 3 or 3A or 3B of 40 CFR part 60, appendix A–2, or ASTM Method D6522–00 (Reapproved 2005)+-- (heated probe not necessary).</td>
<td>(c) The CO concentration must be at 15 percent O&lt;sub&gt;2&lt;/sub&gt;, dry basis.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>ii. Measure the O&lt;sub&gt;2&lt;/sub&gt; at the inlet and outlet of the control device; and</td>
<td>(1) ASTM D6522–00 (Reapproved 2005)+-- (heated probe not necessary) or Method 10 of 40 CFR part 60, appendix A–4.</td>
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<td></td>
<td></td>
<td>iii. Measure the CO at the inlet and the outlet of the control device.</td>
<td>(1) Method 3 or 3A or 3B of 40 CFR part 60, appendix A–2, or ASTM Method D6522–00 (Reapproved 2005)+-- (heated probe not necessary).</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>(a) Measurements to determine O&lt;sub&gt;2&lt;/sub&gt; concentration must be made at the same time as the measurements for CO concentration.</td>
<td></td>
</tr>
<tr>
<td>2. 4SRB stationary RICE.</td>
<td>a. reduce formaldehyde emissions.</td>
<td>i. Select the sampling port location and the number/location of traverse points at the inlet and outlet of the control device; and</td>
<td>(a) Formaldehyde, O&lt;sub&gt;2&lt;/sub&gt;, and moisture measurement, ducts &gt;6 inches in diameter may be sampled at a single point located at the duct centroid and ducts &gt;6 and ≤12 inches in diameter may be sampled at 3 traverse points located at 16.7, 50.0, and 83.3% of the measurement line (‘3-point long line’). If the duct is &gt;12 inches in diameter and the sampling port location meets the two and half-diameter criterion of Section 11.1.1 of Method 1 of 40 CFR part 60, appendix A, the duct may be sampled at ‘3-point long line’; otherwise, conduct the stratification testing and select sampling points according to Section 8.1.2 of Method 7E of 40 CFR part 60, appendix A.</td>
<td>(a) Measurements to determine O&lt;sub&gt;2&lt;/sub&gt; concentration must be made at the same time as the measurements for formaldehyde or THC concentration.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>ii. Measure O&lt;sub&gt;2&lt;/sub&gt; at the inlet and outlet of the control device; and</td>
<td>(1) Method 3 or 3A or 3B of 40 CFR part 60, appendix A–2, or ASTM Method D6522–00 (Reapproved 2005)+-- (heated probe not necessary).</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>(b) Measurements to determine O&lt;sub&gt;2&lt;/sub&gt; concentration must be at 15 percent O&lt;sub&gt;2&lt;/sub&gt;, dry basis.</td>
<td></td>
</tr>
</tbody>
</table>
### Pt. 63, Subpt. ZZZZ, Table 4

<table>
<thead>
<tr>
<th>For each . . .</th>
<th>Complying with the requirement to . . .</th>
<th>You must . . .</th>
<th>Using . . .</th>
<th>According to the following requirements . . .</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>iii. Measure moisture content at the inlet and outlet of the control device; and</td>
<td>(1) Method 4 of 40 CFR part 60, appendix A–3, or Method 320 of 40 CFR part 63, appendix A, or ASTM D 6348–03.(^a)</td>
<td>(a) Measurements to determine moisture content must be made at the same time and location as the measurements for formaldehyde or THC concentration.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>iv. If demonstrating compliance with the formaldehyde percent reduction requirement, measure formaldehyde at the inlet and outlet of the control device.</td>
<td>(1) Method 320 or 323 of 40 CFR part 63, appendix A; or ASTM D6348–03, 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.</td>
<td>(a) Formaldehyde concentration must be at 15 percent O(_2), dry basis. Results of this test consist of the average of the three 1-hour or longer runs.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>v. If demonstrating compliance with the THC percent reduction requirement, measure THC at the inlet and outlet of the control device.</td>
<td>(1) Method 25A, reported as propane, of 40 CFR part 60, appendix A–T.</td>
<td>(a) THC concentration must be at 15 percent O(_2), dry basis. Results of this test consist of the average of the three 1-hour or longer runs.</td>
<td></td>
</tr>
<tr>
<td>3. Stationary RICE</td>
<td>a. limit the concentration of formaldehyde or CO in the stationary RICE exhaust.</td>
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<td></td>
</tr>
<tr>
<td></td>
<td>i. Select the sampling port location and the number/location of traverse points at the exhaust of the stationary RICE; and</td>
<td></td>
<td>(a) For formaldehyde, CO, O(_2), and moisture measurement, ducts ≤6 inches in diameter may be sampled at a single point located at the duct centroid and ducts &gt;6 and ≤12 inches in diameter may be sampled at 3 traverse points located at 16.7, 50.0, and 83.3% of the measurement line (‘3-point long line’). If the duct is &gt;12 inches in diameter and the sampling port location meets the two and half-diameter criterion of Section 11.1.1 of Method 1 of 40 CFR part 60, appendix A, the duct may be sampled at ‘3-point long line’; otherwise, conduct the stratification testing and select sampling points according to Section 8.1.2 of Method 7E of 40 CFR part 60, appendix A. If using a control device, the sampling site must be located at the outlet of the control device.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>ii. Determine the O(_2) concentration of the stationary RICE exhaust at the sampling port location; and</td>
<td>(1) Method 3 or 3A or 3B of 40 CFR part 60, appendix A–2, or ASTM Method D6522–00 (Reapproved 2005) (heated probe not necessary)</td>
<td>(a) Measurements to determine O(_2) concentration must be made at the same time and location as the measurements for formaldehyde or CO concentration.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>iii. Measure moisture content of the stationary RICE exhaust at the sampling port location; and</td>
<td>(1) Method 4 of 40 CFR part 60, appendix A–3, or Method 320 of 40 CFR part 63, appendix A, or ASTM D 6348–03.(^a)</td>
<td>(a) Measurements to determine moisture content must be made at the same time and location as the measurements for formaldehyde or CO concentration.</td>
<td></td>
</tr>
</tbody>
</table>
### Table 5 to Subpart ZZZZ of Part 63—Initial Compliance With Emission Limitations, Operating Limitations, and Other Requirements

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

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

- You may also use Methods 3A and 10 in place of 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.
- 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.

[79 FR 11290, Feb. 27, 2014]
<p>| 3. New or reconstructed non-emergency 2SLB stationary RICE &gt;500 HP located at a major source of HAP, non-emergency stationary CI RICE &gt;250 HP located at a major source of HAP, and existing non-emergency stationary CI RICE &gt;500 HP located at an area source of HAP. | a. Reduce CO emissions and not using oxidation catalyst. | i. The average reduction of CO emissions determined from the initial performance test is less than or equal to the CO emission limitation. ii. You have installed a CPMS to continuously monitor CO and either O₂ or CO₂ at the inlet and outlet of the oxidation catalyst according to the requirements in §63.6625(a); and iii. You have conducted a performance evaluation of your CEMS using §63.6620 and P1 or P2 of 40 CFR part 60, appendix B; and |
| 4. Non-emergency stationary CI RICE &gt;500 HP located at a major source of HAP, and existing non-emergency stationary CI RICE &gt;500 HP located at an area source of HAP. | a. Limit the concentration of CO, and not using oxidation catalyst. | i. The average CO concentration determined from the initial performance test is less than or equal to the CO emission limitation; ii. You have installed a CPMS to continuously monitor CO and either O₂ or CO₂ at the outlet of the oxidation catalyst according to the requirements in §63.6625(a); and iii. You have recorded the approved operating parameters (if any) during the initial performance test. |
| 5. New or reconstructed non-emergency 2SLB stationary RICE &gt;500 HP located at a major source of HAP, non-emergency stationary CI RICE &gt;250 HP located at a major source of HAP, and existing non-emergency stationary CI RICE &gt;500 HP located at an area source of HAP. | a. Reduce CO emissions, and using a CEMS. | i. You have installed a CEMS to continuously monitor CO and either O₂ or CO₂ at both the inlet and outlet of the oxidation catalyst according to the requirements in §63.6625(a); and ii. You have conducted a performance evaluation of your CEMS using §63.6620, P3 and P4 of 40 CFR part 60, appendix B; and iii. The average reduction of CO calculated using §63.6620 is less than or equal to the CO emission limitation. The initial test comprises the first 4-hour period after successful validation of the CEMS. Compliance is based on the average percent reduction achieved during the 4-hour period. |
| 6. Non-emergency stationary CI RICE &gt;500 HP located at a major source of HAP, and existing non-emergency stationary CI RICE &gt;500 HP located at an area source of HAP. | a. Limit the concentration of CO, and using a CEMS. | i. You have installed a CEMS to continuously monitor CO and either O₂ or CO₂ at both the inlet and outlet of the oxidation catalyst according to the requirements in §63.6625(a); and ii. You have conducted a performance evaluation of your CEMS using §63.6620, P3 and P4 of 40 CFR part 60, appendix B; and iii. The average concentration of CO calculated using §63.6620 is less than or equal to the CO emission limitation. The initial test comprises the first 4-hour period after successful validation of the CEMS. Compliance is based on the average concentration measured during the 4-hour period. |
| 7. Non-emergency 4SRB stationary RICE &gt;500 HP located at a major source of HAP. | a. Reduce formaldehyde emissions and using NSCR. | i. The average reduction of formaldehyde emissions determined from the initial performance test is equal to or greater than the required formaldehyde percent reduction, or the average reduction of emissions of THC determined from the initial performance test is equal to or greater than 30 percent; and ii. You have installed a CPMS to continuously monitor catalyst inlet temperature according to the requirements in §63.6625(b); and |</p>
<table>
<thead>
<tr>
<th>Environmental Protection Agency</th>
<th>Pt. 63, Subpt. ZZZZ, Table 5</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>For each . . .</strong></td>
<td><strong>Complying with the requirement to . . .</strong></td>
</tr>
<tr>
<td><strong>8. Non-emergency 4SRB stationary RICE &gt;500 HP located at a major source of HAP.</strong></td>
<td>a. Reduce formaldehyde emissions and not using NSCR.</td>
</tr>
<tr>
<td><strong>9. New or reconstructed non-emergency stationary RICE &gt;500 HP located at a major source of HAP, new or reconstructed non-emergency 4SLB stationary RICE 250-HP&lt;500 located at a major source of HAP, and existing non-emergency 4SRB stationary RICE &gt;500 HP located at a major source of HAP.</strong></td>
<td>a. Limit the concentration of formaldehyde in the stationary RICE exhaust and not using oxidation catalyst or NSCR.</td>
</tr>
<tr>
<td><strong>10. New or reconstructed non-emergency stationary RICE &gt;500 HP located at a major source of HAP, new or reconstructed non-emergency 4SLB stationary RICE 250-HP&lt;500 located at a major source of HAP, and existing non-emergency 4SRB stationary RICE &gt;500 HP located at a major source of HAP.</strong></td>
<td>a. Limit the concentration of formaldehyde in the stationary RICE exhaust and not using oxidation catalyst or NSCR.</td>
</tr>
<tr>
<td><strong>11. Existing non-emergency stationary RICE 100-HP&lt;500 located at a major source of HAP, and existing non-emergency stationary CI RICE 300-HP&lt;500 located at an area source of HAP.</strong></td>
<td>a. Reduce CO emissions.</td>
</tr>
<tr>
<td><strong>12. Existing non-emergency stationary RICE 100-HP&lt;500 located at a major source of HAP, and existing non-emergency stationary CI RICE 300-HP&lt;500 located at an area source of HAP.</strong></td>
<td>a. Limit the concentration of formaldehyde or CO in the stationary RICE exhaust.</td>
</tr>
<tr>
<td><strong>13. Existing non-emergency 4SLB stationary RICE &gt;500 HP located at an area source of HAP that are not remote stationary RICE and that are operated more than 24 hours per calendar year.</strong></td>
<td>a. Install an oxidation catalyst.</td>
</tr>
</tbody>
</table>
TABLE 6 TO SUBPART ZZZZ OF PART 63—CONTINUOUS COMPLIANCE WITH EMISSION LIMITATIONS, AND OTHER REQUIREMENTS

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

<table>
<thead>
<tr>
<th>For each . . .</th>
<th>Complying with the requirement to . . .</th>
<th>You must demonstrate continuous compliance by . . .</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. New or reconstructed non-emergency 25LB stationary RICE &gt;500 HP located at a major source of HAP, new or reconstructed non-emergency 45LB stationary RICE &gt;250 HP located at a major source of HAP, and new or reconstructed non-emergency CI stationary RICE &gt;500 HP located at a major source of HAP.</td>
<td>a. Reduce CO emissions and not using an oxidation catalyst, and using a CPMS.</td>
<td>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.</td>
</tr>
<tr>
<td>2. New or reconstructed non-emergency 25LB stationary RICE &gt;500 HP located at a major source of HAP, new or reconstructed non-emergency 45LB stationary RICE &gt;250 HP located at a major source of HAP, and new or reconstructed non-emergency CI stationary RICE &gt;500 HP located at a major source of HAP.</td>
<td>a. Reduce CO emissions or limit the concentration of CO in the stationary RICE exhaust, and using a CEMS.</td>
<td>i. Collecting monitoring data according to §63.6625(a), reducing the measurements to 1-hour averages, calculating the percent reduction or concentration of CO emissions according to §63.6620; and ii. Demonstrating that the catalyst achieves the required percent reduction of CO emissions over the 4-hour averaging period, or that the emission remain at or below the CO concentration limit; and</td>
</tr>
<tr>
<td>For each . . .</td>
<td>Complying with the requirement to . . .</td>
<td>You must demonstrate continuous compliance by . . .</td>
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<td>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.</td>
</tr>
<tr>
<td>5. Non-emergency 4SRB stationary RICE &gt;500 HP located at a major source of HAP.</td>
<td>a. Reduce formaldehyde emissions and not using NSCR.</td>
<td>i. Collecting the catalyst inlet temperature data according to §63.6625(b); and</td>
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<td></td>
<td></td>
<td>ii. Reducing these data to 4-hour rolling averages; and</td>
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<td></td>
<td>iii. Maintaining the 4-hour rolling averages within the operating limitations for the catalyst inlet temperature; and</td>
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<tr>
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<td></td>
<td>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.</td>
</tr>
<tr>
<td>6. Non-emergency 4SRB stationary RICE with a brake HP ≥500 located at a major source of HAP.</td>
<td>a. Reduce formaldehyde emissions using oxidation catalyst or NSCR.</td>
<td>Conducting semiannual performance tests for formaldehyde to demonstrate that your emissions remain at or below the formaldehyde concentration limit; and</td>
</tr>
<tr>
<td></td>
<td></td>
<td>i. Collecting the catalyst inlet temperature data according to §63.6625(b); and</td>
</tr>
<tr>
<td></td>
<td></td>
<td>ii. Reducing these data to 4-hour rolling averages; and</td>
</tr>
<tr>
<td></td>
<td></td>
<td>iii. Maintaining the 4-hour rolling averages within the operating limitations for the catalyst inlet temperature; and</td>
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<tr>
<td></td>
<td></td>
<td>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.</td>
</tr>
<tr>
<td>7. New or reconstructed non-emergency stationary RICE &gt;500 HP located at a major source of HAP and new or reconstructed non-emergency 4SLB stationary RICE 250≤HP≤500 located at a major source of HAP.</td>
<td>a. Limit the concentration of formaldehyde in the stationary RICE exhaust and using oxidation catalyst or NSCR.</td>
<td>i. Conducting semiannual performance tests for formaldehyde to demonstrate that your emissions remain at or below the formaldehyde concentration limit; and</td>
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<tr>
<td></td>
<td></td>
<td>ii. Collecting the catalyst inlet temperature data according to §63.6625(b); and</td>
</tr>
<tr>
<td></td>
<td></td>
<td>iii. Reducing these data to 4-hour rolling averages; and</td>
</tr>
<tr>
<td></td>
<td></td>
<td>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.</td>
</tr>
<tr>
<td>8. New or reconstructed non-emergency stationary RICE &gt;500 HP located at a major source of HAP and new or reconstructed non-emergency 4SLB stationary RICE 250≤HP≤500 located at a major source of HAP.</td>
<td>a. Limit the concentration of formaldehyde in the stationary RICE exhaust and not using oxidation catalyst or NSCR.</td>
<td>i. Conducting semiannual performance tests for formaldehyde to demonstrate that your emissions remain at or below the formaldehyde concentration limit; and</td>
</tr>
<tr>
<td></td>
<td></td>
<td>ii. Collecting the approved operating parameter (if any) data according to §63.6625(b); and</td>
</tr>
<tr>
<td></td>
<td></td>
<td>iii. Reducing these data to 4-hour rolling averages; and</td>
</tr>
<tr>
<td></td>
<td></td>
<td>iv. Maintaining the 4-hour rolling averages within the operating limitations for the operating parameters established during the performance test.</td>
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</tbody>
</table>
For each . . . Complying with the requirement to . . . You must demonstrate continuous compliance by . . .

9. Existing emergency and black start stationary RICE ≤500 HP located at a major source of HAP, existing non-emergency stationary RICE <100 HP located at a major source of HAP, existing emergency and black start stationary RICE located at an area source of HAP, existing non-emergency stationary CI RICE ≤300 HP located at an area source of HAP, existing non-emergency stationary SI RICE located at an area source of HAP which combusts landfill or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis, existing non-emergency 4SLB and 4SRB stationary RICE >500 HP located at an area source of HAP that operate 24 hours or less per calendar year, and existing non-emergency 4SLB and 4SRB stationary RICE >500 HP located at an area source of HAP that are remote stationary RICE.

   a. Work or Management practices . . . .
      i. Operating and maintaining the stationary RICE according to the manufacturer’s emission-related operation and maintenance instructions; or
      ii. Develop and follow your own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions.

10. Existing stationary CI RICE >500 HP that are not limited use stationary RICE.

   a. Reduce CO emissions, or limit the concentration of CO in the stationary RICE exhaust, and using oxidation catalyst.

      i. Conducting performance tests every 8,760 hours or 3 years, whichever comes first, for CO or formaldehyde, as appropriate, to demonstrate that the required CO or formaldehyde, as appropriate, percent reduction is achieved or that your emissions remain at or below the CO or formaldehyde concentration limit; and
      ii. Collecting the catalyst inlet temperature data according to §63.6625(b); and
      iii. Reducing these data to 4-hour rolling averages; and
      iv. Maintaining the 4-hour rolling averages within the operating limitations established during the performance test.

11. Existing stationary CI RICE >500 HP that are not limited use stationary RICE.

   a. Reduce CO emissions, or limit the concentration of CO in the stationary RICE exhaust, and not using oxidation catalyst.

      i. Conducting performance tests every 8,760 hours or 3 years, whichever comes first, for CO or formaldehyde, as appropriate, to demonstrate that the required CO or formaldehyde, as appropriate, percent reduction is achieved or that your emissions remain at or below the CO or formaldehyde concentration limit; and
      ii. Collecting the approved operating parameter (if any) data according to §63.6625(b); and
      iii. Reducing these data to 4-hour rolling averages; and
      iv. Maintaining the 4-hour rolling averages within the operating limitations for the operating parameters established during the performance test.
## Environmental Protection Agency

### Pt. 63, Subpt. ZZZZ, Table 6

<table>
<thead>
<tr>
<th>For each . . .</th>
<th>Complying with the requirement to . . .</th>
<th>You must demonstrate continuous compliance by . . .</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>12. Existing limited use CI stationary RICE &gt;500 HP.</strong></td>
<td>a. Reduce CO emissions or limit the concentration of CO in the stationary RICE exhaust, and using an oxidation catalyst.</td>
<td>i. Conducting performance tests every 8,760 hours or 5 years, whichever comes first, for CO or formaldehyde, as appropriate, to demonstrate that the required CO or formaldehyde, as appropriate, percent reduction is achieved or that your emissions remain at or below the CO or formaldehyde concentration limit; and ii. Collecting the catalyst inlet temperature data according to §63.6625(b); and iii. Reducing these data to 4-hour rolling averages; and iv. Maintaining the 4-hour rolling averages within the operating limitations for the catalyst inlet temperature; and v. Measuring the pressure drop across the catalyst once per month and demonstrating that the pressure drop across the catalyst is within the operating limitation established during the performance test.</td>
</tr>
<tr>
<td><strong>13. Existing limited use CI stationary RICE &gt;500 HP.</strong></td>
<td>a. Reduce CO emissions or limit the concentration of CO in the stationary RICE exhaust, and not using an oxidation catalyst.</td>
<td>i. Conducting performance tests every 8,760 hours or 5 years, whichever comes first, for CO or formaldehyde, as appropriate, to demonstrate that the required CO or formaldehyde, as appropriate, percent reduction is achieved or that your emissions remain at or below the CO or formaldehyde concentration limit; and ii. Collecting the approved operating parameter (if any) data according to §63.6625(b); and iii. Reducing these data to 4-hour rolling averages; and iv. Maintaining the 4-hour rolling averages within the operating limitations for the operating parameters established during the performance test.</td>
</tr>
<tr>
<td><strong>14. Existing non-emergency 4SLB stationary RICE &gt;500 HP located at an area source of HAP that are not remote stationary RICE and that are operated more than 24 hours per calendar year.</strong></td>
<td>a. Install an oxidation catalyst . . . . . . . . .</td>
<td>i. Conducting annual compliance demonstrations as specified in §63.6640(c) to show that the average reduction of emissions of CO is 93 percent or more, or the average CO concentration is less than or equal to 47 ppmvd at 15 percent O(_2); and either ii. Collecting the catalyst inlet temperature data according to §63.6625(b), reducing these data to 4-hour rolling averages; and maintaining the 4-hour rolling averages within the limitation of greater than 450 °F and less than or equal to 1350 °F for the catalyst inlet temperature; or iii. Immediately shutting down the engine if the catalyst inlet temperature exceeds 1350 °F.</td>
</tr>
</tbody>
</table>
For each . . . You must demonstrate continuous compliance by . . .

15. Existing non-emergency 4SRB stationary RICE >500 HP located at an area source of HAP that are operated more than 24 hours per calendar year.

- Install NSCR ....
  - i. Conducting annual compliance demonstrations as specified in §63.6640(c) to show that the average reduction of emissions of CO is 75 percent or more, the average CO concentration is less than or equal to 270 ppmvd at 15 percent O\textsubscript{2}, or the average reduction of emissions of THC is 30 percent or more; and either
    - ii. Collecting the catalyst inlet temperature data according to §63.6625(b), reducing these data to 4-hour rolling averages; and maintaining the 4-hour rolling averages within the limitation of greater than or equal to 750 °F and less than or equal to 1250 °F for the catalyst inlet temperature; or
    - iii. Immediately shutting down the engine if the catalyst inlet temperature exceeds 1250 °F.

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

[78 FR 6715, Jan. 30, 2013]

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

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

<table>
<thead>
<tr>
<th>For each . . .</th>
<th>The report must contain . . .</th>
<th>You must submit the report . . .</th>
</tr>
</thead>
</table>

1. Existing non-emergency, non-black start stationary RICE 1000 HP ≤ 500 located at a major source of HAP; existing non-emergency, non-black start stationary CI RICE >500 HP located at a major source of HAP; existing non-emergency 4SRB stationary RICE >500 HP located at a major source of HAP; existing non-emergency stationary RICE >300 HP located at an area source of HAP; new or reconstructed non-emergency stationary RICE >500 HP located at a major source of HAP; and new or reconstructed non-emergency 4SLB stationary RICE 250 HP ≤ 500 located at a major source of HAP.

- Compliance report ..........  
  - a. If there are no deviations from any emission limitations or operating limitations that apply to you, a statement that there were no deviations from the emission limitations or operating limitations during the reporting period; and 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 no 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(b). 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(c); or
  - c. If you had a malfunction during the reporting period, the information in §63.6650(c)(4).

- i. Semiannually according to the requirements in §63.6660(b)(1)–(5) for engines that are not limited use stationary RICE subject to numerical emission limitations; and
  - ii. Annually according to the requirements in §63.6660(b)(6)–(9) for engines that are limited use stationary RICE subject to numerical emission limitations.
For each . . .  You must submit a . . .  The report must contain . . .  You must submit the report . . .

2. New or reconstructed non-emergency stationary RICE that combusts landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis.  
   Report  
   a. The fuel flow rate of each fuel and the heating values that were used in your calculations, and you must demonstrate that the percentage of heat input provided by landfill gas or digester gas, is equivalent to 10 percent or more of the gross heat input on an annual basis; and  
   b. The operating limits provided in your federally enforceable permit, and any deviations from these limits; and  
   c. Any problems or errors suspected with the meters.  
   i. Annually, according to the requirements in § 63.6650.
   i. See item 2.a.i.
   i. See item 2.a.i.
   i. Semiannually according to the requirements in § 63.6650(b)(1)–(5).  

3. Existing non-emergency, non-black start 4SLB and 4SRB stationary RICE >500 HP located at an area source of HAP that are not remote stationary RICE and that operate more than 24 hours per calendar year.  
   Compliance report  
   a. The results of the annual compliance demonstration, if conducted during the reporting period.  
   i. Semiannually according to the requirements in § 63.6650(b)(1)–(5).  

4. Emergency stationary RICE that operate or are contractually obligated to be available for more than 15 hours per year for the purposes specified in § 63.6640(f)(2)(ii) and (iii) or that operate for the purposes specified in § 63.6640(f)(4)(ii).  
   Report  
   a. The information in § 63.6650(h)(1).  
   i. annually according to the requirements in § 63.6650(h)(2)–(3).  

[78 FR 6719, Jan. 30, 2013]

**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.

<table>
<thead>
<tr>
<th>General provisions citation</th>
<th>Subject of citation</th>
<th>Applies to subpart</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>§63.1 ..........................</td>
<td>General applicability of the General Provisions.</td>
<td>Yes.</td>
<td></td>
</tr>
<tr>
<td>§63.2 ..........................</td>
<td>Definitions</td>
<td>Yes ____________ Additional terms defined in §63.6675.</td>
<td></td>
</tr>
<tr>
<td>§63.3 ..........................</td>
<td>Units and abbreviations</td>
<td>Yes.</td>
<td></td>
</tr>
<tr>
<td>§63.4 ..........................</td>
<td>Prohibited activities and circumvention.</td>
<td>Yes.</td>
<td></td>
</tr>
<tr>
<td>§63.5 ..........................</td>
<td>Construction and reconstruction</td>
<td>Yes.</td>
<td></td>
</tr>
<tr>
<td>§63.6(a) ........................</td>
<td>Applicability</td>
<td>Yes.</td>
<td></td>
</tr>
<tr>
<td>§63.6(b)(1)–(4) ...............</td>
<td>Compliance dates for new and reconstructed sources.</td>
<td>Yes.</td>
<td></td>
</tr>
<tr>
<td>§63.6(b)(5) ........................</td>
<td>Notification</td>
<td>Yes.</td>
<td></td>
</tr>
<tr>
<td>§63.6(b)(6) ........................</td>
<td>[Reserved]</td>
<td></td>
<td></td>
</tr>
<tr>
<td>§63.6(b)(7) ........................</td>
<td>Compliance dates for new and reconstructed area sources that become major sources.</td>
<td>Yes.</td>
<td></td>
</tr>
<tr>
<td>§63.6(c)(1)–(2) ...............</td>
<td>Compliance dates for existing sources.</td>
<td>Yes.</td>
<td></td>
</tr>
<tr>
<td>§63.6(c)(3)–(4) ................</td>
<td>[Reserved]</td>
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</tr>
<tr>
<td>§63.6(c)(5) ........................</td>
<td>Compliance dates for existing area sources that become major sources.</td>
<td>Yes.</td>
<td></td>
</tr>
<tr>
<td>§63.6(d) ........................</td>
<td>Operation and maintenance</td>
<td>No.</td>
<td></td>
</tr>
<tr>
<td>§63.6(e) ........................</td>
<td>Applicability of standards</td>
<td>No.</td>
<td></td>
</tr>
<tr>
<td>§63.6(f)(1) ........................</td>
<td>Methods for determining compliance</td>
<td>Yes.</td>
<td></td>
</tr>
<tr>
<td>§63.6(f)(3) ........................</td>
<td>Finding of compliance</td>
<td>Yes.</td>
<td></td>
</tr>
<tr>
<td>§63.6(g)(1)–(3) ................</td>
<td>Use of alternate standard</td>
<td>Yes.</td>
<td></td>
</tr>
<tr>
<td>General provisions citation</td>
<td>Subject of citation</td>
<td>Applies to sub-part</td>
<td>Explanation</td>
</tr>
<tr>
<td>-----------------------------</td>
<td>--------------------</td>
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</tr>
<tr>
<td>§ 63.6(h)</td>
<td>Opacity and visible emission standards.</td>
<td>No</td>
<td>Subpart ZZZZ does not contain opacity or visible emission standards.</td>
</tr>
<tr>
<td>§ 63.6(i)</td>
<td>Compliance extension procedures and criteria.</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>§ 63.6(j)</td>
<td>Presidential compliance exemption</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>§ 63.7(a)(1)–(2)</td>
<td>Performance test dates</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>§ 63.7(a)(3)</td>
<td>CAA section 114 authority</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>§ 63.7(b)(1)</td>
<td>Notification of performance test</td>
<td>Yes</td>
<td>Except that § 63.7(b)(1) only applies as specified in § 63.6645.</td>
</tr>
<tr>
<td>§ 63.7(b)(2)</td>
<td>Notification of rescheduling</td>
<td>Yes</td>
<td>Except that § 63.7(b)(2) only applies as specified in § 63.6645.</td>
</tr>
<tr>
<td>§ 63.7(c)</td>
<td>Quality assurance/test plan</td>
<td>Yes</td>
<td>Except that § 63.7(c) only applies as specified in § 63.6645.</td>
</tr>
<tr>
<td>§ 63.7(d)</td>
<td>Testing facilities</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>§ 63.7(e)(1)</td>
<td>Conditions for conducting performance tests.</td>
<td>No</td>
<td>Subpart ZZZZ specifies conditions for conducting performance tests at § 63.6620.</td>
</tr>
<tr>
<td>§ 63.7(e)(2)</td>
<td>Conduct of performance tests and reduction of data.</td>
<td>Yes</td>
<td>Subpart ZZZZ specifies test methods at § 63.6620.</td>
</tr>
<tr>
<td>§ 63.7(e)(3)</td>
<td>Test run duration</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>§ 63.7(e)(4)</td>
<td>Administrator may require other testing under section 114 of the CAA.</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>§ 63.7(f)</td>
<td>Alternative test method provisions</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>§ 63.7(g)</td>
<td>Performance test data analysis, recordkeeping, and reporting.</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>§ 63.7(h)</td>
<td>Waiver of tests</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>§ 63.8(a)(1)</td>
<td>Applicability of monitoring requirements.</td>
<td>Yes</td>
<td>Subpart ZZZZ contains specific requirements for monitoring at § 63.6625.</td>
</tr>
<tr>
<td>§ 63.8(a)(2)</td>
<td>Performance specifications</td>
<td>Yes</td>
<td></td>
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<tr>
<td>§ 63.8(a)(3)</td>
<td>Monitoring for control devices</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>§ 63.8(a)(4)</td>
<td>Monitoring</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>§ 63.8(b)(1)</td>
<td>Multiple effluents and multiple monitoring systems.</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>§ 63.8(c)(1)</td>
<td>Monitoring system operation and maintenance.</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>§ 63.8(c)(1)(i)</td>
<td>Routine and predictable SSM</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>§ 63.8(c)(1)(ii)</td>
<td>SSM not in Startup Shutdown Malfunction Plan</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>§ 63.8(c)(1)(iii)</td>
<td>Compliance with operation and maintenance requirements.</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>§ 63.8(c)(2)–(3)</td>
<td>Continuous monitoring system installation</td>
<td>Yes</td>
<td>Except that subpart ZZZZ does not require Continuous Opacity Monitoring System (COMS).</td>
</tr>
<tr>
<td>§ 63.8(c)(4)</td>
<td>Continuous monitoring system (CMS) requirements.</td>
<td>Yes</td>
<td>Except that subpart ZZZZ does not require COMS.</td>
</tr>
<tr>
<td>§ 63.8(c)(5)</td>
<td>COMS minimum procedures</td>
<td>No</td>
<td>Subpart ZZZZ does not require COMS.</td>
</tr>
<tr>
<td>§ 63.8(c)(6)–(8)</td>
<td>CMS requirements</td>
<td>Yes</td>
<td>Except that subpart ZZZZ does not require COMS.</td>
</tr>
<tr>
<td>§ 63.8(d)</td>
<td>CMS quality control</td>
<td>Yes</td>
<td>Except for § 63.8(a)(5)(ii), which applies to COMS.</td>
</tr>
<tr>
<td>§ 63.8(e)</td>
<td>CMS performance evaluation</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>§ 63.8(f)(1)–(5)</td>
<td>Alternative monitoring method</td>
<td>Yes</td>
<td>Except that § 63.8(f)(4) only applies as specified in § 63.6645.</td>
</tr>
<tr>
<td>§ 63.8(f)(6)</td>
<td>Alternative to relative accuracy test</td>
<td>Yes</td>
<td>Except that § 63.8(f)(6) only applies as specified in § 63.6645.</td>
</tr>
<tr>
<td>§ 63.8(g)</td>
<td>Data reduction</td>
<td>Yes</td>
<td>Except that provisions for COMS are not applicable. Averaging periods for demonstrating compliance are specified at §§ 63.6635 and 63.6640.</td>
</tr>
<tr>
<td>§ 63.9(a)</td>
<td>Applicability and State delegation of notification requirements.</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>§ 63.9(b)(1)–(5)</td>
<td>Initial notifications</td>
<td>Yes</td>
<td>Except that § 63.9(b)(3) is reserved.</td>
</tr>
<tr>
<td>General provisions citation</td>
<td>Subject of citation</td>
<td>Applies to sub-part</td>
<td>Explanation</td>
</tr>
<tr>
<td>-----------------------------</td>
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</tr>
<tr>
<td>§63.9(c) Request for compliance extension</td>
<td>Yes</td>
<td>Except that §63.9(b) only applies as specified in §63.6645.</td>
<td></td>
</tr>
<tr>
<td>§63.9(d) Notification of special compliance requirements for new sources</td>
<td>Yes</td>
<td>Except that §63.9(d) only applies as specified in §63.6645.</td>
<td></td>
</tr>
<tr>
<td>§63.9(e) Notification of performance test</td>
<td>Yes</td>
<td>Except that §63.9(e) only applies as specified in §63.6645.</td>
<td></td>
</tr>
<tr>
<td>§63.9(f) Notification of visible emission (VE)/opacity test</td>
<td>No</td>
<td>Subpart ZZZZ does not contain opacity or VE standards.</td>
<td></td>
</tr>
<tr>
<td>§63.9(g)(1) Notification of performance evaluation</td>
<td>Yes</td>
<td>Except that §63.9(g) only applies as specified in §63.6645.</td>
<td></td>
</tr>
<tr>
<td>§63.9(g)(2) Notification of use of COMS data</td>
<td>No</td>
<td>Subpart ZZZZ does not contain opacity or VE standards.</td>
<td></td>
</tr>
<tr>
<td>§63.9(g)(3) Notification that criterion for alternative to RATA is exceeded</td>
<td>Yes</td>
<td>If alternative is in use.</td>
<td></td>
</tr>
<tr>
<td>§63.9(h)(1)–(6) Notification of compliance status</td>
<td>Yes</td>
<td>Except that notifications for sources using a CEMS are due 30 days after completion of performance evaluations. §63.9(h)(4) is reserved.</td>
<td></td>
</tr>
<tr>
<td>§63.9(i) Adjustment of submittal deadlines</td>
<td>Yes</td>
<td>Except that §63.9(i) only applies as specified in §63.6645.</td>
<td></td>
</tr>
<tr>
<td>§63.9(j) Change in previous information</td>
<td>Yes</td>
<td>Except that the most recent 2 years of data do not have to be retained on site.</td>
<td></td>
</tr>
<tr>
<td>§63.10(a) Administrative provisions for record-keeping/reporting</td>
<td>Yes</td>
<td>Except that §63.10(a) only applies as specified in §63.6645.</td>
<td></td>
</tr>
<tr>
<td>§63.10(b)(1)–(5) Records related to SSM</td>
<td>No</td>
<td>For CO standard if using RATA alternative.</td>
<td></td>
</tr>
<tr>
<td>§63.10(b)(6) Records when under waiver</td>
<td>Yes</td>
<td>Except that §63.10(c)(2)–(4) and (9) are reserved.</td>
<td></td>
</tr>
<tr>
<td>§63.10(b)(7)–(9) Records of supporting documentation</td>
<td>Yes</td>
<td>Except that §63.10(c)(2)–(4) and (9) are reserved.</td>
<td></td>
</tr>
<tr>
<td>§63.10(c) Additional records for sources using CEMS</td>
<td>Yes</td>
<td>Subpart ZZZZ does not contain opacity or VE standards.</td>
<td></td>
</tr>
<tr>
<td>§63.10(d)(1) General reporting requirements</td>
<td>Yes</td>
<td>Subpart ZZZZ does not require COMS.</td>
<td></td>
</tr>
<tr>
<td>§63.10(d)(2) Report of performance test results</td>
<td>Yes</td>
<td>Except that §63.10(e)(3)(i) (C) is reserved.</td>
<td></td>
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<tr>
<td>§63.10(d)(3) Reporting opacity or VE observations</td>
<td>No</td>
<td>Subpart ZZZZ does not require COMS.</td>
<td></td>
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<tr>
<td>§63.10(e)(1) Progress reports</td>
<td>Yes</td>
<td>Subpart ZZZZ does not require COMS.</td>
<td></td>
</tr>
<tr>
<td>§63.10(e)(2) Startup, shutdown, and malfunction reports</td>
<td>No</td>
<td>Subpart ZZZZ does not require COMS.</td>
<td></td>
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<tr>
<td>§63.10(e)(3) Additional CMS Reports</td>
<td>Yes</td>
<td>Subpart ZZZZ does not require COMS.</td>
<td></td>
</tr>
<tr>
<td>§63.10(e)(4) Reporting COMS data</td>
<td>No</td>
<td>Subpart ZZZZ does not require COMS.</td>
<td></td>
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<tr>
<td>§63.10(f) Waiver for recordkeeping/reporting</td>
<td>Yes</td>
<td>Subpart ZZZZ does not require COMS.</td>
<td></td>
</tr>
<tr>
<td>§63.11 Flares</td>
<td>No</td>
<td>Subpart ZZZZ does not require COMS.</td>
<td></td>
</tr>
<tr>
<td>§63.12 State authority and delegations</td>
<td>Yes</td>
<td>Subpart ZZZZ does not require COMS.</td>
<td></td>
</tr>
<tr>
<td>§63.13 Addresses</td>
<td>Yes</td>
<td>Subpart ZZZZ does not require COMS.</td>
<td></td>
</tr>
<tr>
<td>§63.14 Incorporation by reference</td>
<td>Yes</td>
<td>Subpart ZZZZ does not require COMS.</td>
<td></td>
</tr>
<tr>
<td>§63.15 Availability of information</td>
<td>Yes</td>
<td>Subpart ZZZZ does not require COMS.</td>
<td></td>
</tr>
</tbody>
</table>
APPENDIX A TO SUBPART ZZZZ OF PART 63—PROTOCOL FOR USING AN ELECTROCHEMICAL ANALYZER TO DETERMINE OXYGEN AND CARBON MONOXIDE CONCENTRATIONS FROM CERTAIN ENGINES

1.0 SCOPE AND APPLICATION. WHAT IS THIS PROTOCOL?

This protocol is a procedure for using portable electrochemical (EC) cells for measuring carbon monoxide (CO) and oxygen (O₂) concentrations in controlled and uncontrolled emissions from existing stationary 4-stroke lean burn and 4-stroke rich burn reciprocating internal combustion engines as specified in the applicable rule.

1.1 Analytes. What does this protocol determine?

This protocol measures the engine exhaust gas concentrations of carbon monoxide (CO) and oxygen (O₂).

<table>
<thead>
<tr>
<th>Analyte</th>
<th>CAS No</th>
<th>Sensitivity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carbon monoxide</td>
<td>630–08–0</td>
<td>Minimum detectable limit should be 2 percent of the nominal range or 1 ppm, whichever is less restrictive.</td>
</tr>
<tr>
<td>Oxygen (O₂)</td>
<td>7782–44–7</td>
<td></td>
</tr>
</tbody>
</table>

1.2 Applicability. When is this protocol acceptable?

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

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

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

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

The measurement system and EC cell design(s) conforming to this protocol will determine the analytical range for each gas component. The nominal ranges are defined by choosing up-scale calibration gas concentrations near the maximum anticipated flue gas concentrations for CO and O₂, or no more than twice the permitted CO level.

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

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

2.0 SUMMARY OF PROTOCOL

In this protocol, a gas sample is extracted from an engine exhaust system and then conveyed to a portable EC analyzer for measuring carbon monoxide (CO) and oxygen (O₂) concentrations in controlled and uncontrolled emissions from existing stationary 4-stroke lean burn and 4-stroke rich burn reciprocating internal combustion engines as specified in the applicable rule.

3.0 DEFINITIONS

3.1 Measurement System. The total equipment required for the measurement of CO and O₂ concentrations. The measurement system consists of the following major subsystems:

3.1.1 Data Recorder. A strip chart recorder, computer or digital recorder for logging measurement data from the analyzer output. You may record measurement data from the digital data display manually or electronically.

3.1.2 Electrochemical (EC) Cell. A device, similar to a fuel cell, used to sense the presence of a specific analyte and generate an electrical current output proportional to the analyte concentration.

3.1.3 Interference Gas Scrubber. A device used to remove or neutralize chemical compounds that may interfere with the selective operation of an EC cell.

3.1.4 Moisture Removal System. Any device used to reduce the concentration of moisture in the sample stream so as to protect the EC cells from the damaging effects of condensation and to minimize errors in measurements caused by the scrubbing of soluble gases.

3.1.5 Sample Interface. The portion of the system used for one or more of the following: sample acquisition; sample transport; sample conditioning or protection of the EC cell from any degrading effects of the engine exhaust effluent; removal of particulate matter and condensed moisture.

3.2 Nominal Range. The range of analyte concentrations over which each EC cell is operated (normally 25 percent to 150 percent of up-scale calibration gas value). Several
nominal ranges can be used for any given cell so long as the calibration and repeat-ability checks for that range remain within specifications.

3.3 Calibration Gas. A vendor certified concentra-tion of a specific analyte in an appro-priate balance gas.

3.4 Zero Calibration Error. The analyte concentra-tion output exhibited by the EC cell in response to zero-level calibration gas.

3.5 Up-Scale Calibration Error. The mean of the difference between the analyte concentra-tion exhibited by the EC cell and the certified concentration of the up-scale cali-bration gas.

3.6 Interference Check. A procedure for quantifying analytical interference from components in the engine exhaust gas other than the targeted analytes.

3.7 Repeatability Check. A protocol for demonstrat-ing that an EC cell operated over a given nominal analyte concentration range provides a stable and consistent response and is not significantly affected by repeated ex-posure to that gas.

3.8 Sample Flow Rate. The flow rate of the gas sample as it passes through the EC cell. In some situations, EC cells can experience drift with changes in flow rate. The flow rate must be monitored and documented during all phases of a sampling run.

3.9 Sampling Run. A timed three-phase event whereby an EC cell’s response rises and plateaus in a sample conditioning phase, remains relatively constant during a measurement data phase, then declines during a refresh phase. The sample conditioning phase exposes the EC cell to the gas sample for a length of time sufficient to reach a constant response. The measurement data phase is the time interval during which gas sample measurements can be made that meet the acceptance criteria of this protocol. The refresh phase then purges the EC cells with CO-free air. The refresh phase replenishes requisite O₂ and moisture in the electrolyte reserve and provides a mechanism to de-gas or desorb any interference gas scrubbers or filters so as to enable a stable CO EC cell re-sponse. There are four primary types of sampling runs: pre- sampling calibrations; stack gas sampling; post-sampling calibration checks; and measurement system repeat-ability checks. Stack gas sampling runs can be chained together for extended evaluation, providing all other procedural specifications are met.

3.10 Sampling Day. A time not to exceed twelve hours from the time of the pre-sampling calibration to the post-sampling calibration check. During this time, stack gas sampling runs can be repeated without repeated recalibrations, providing all other sampling specifications have been met.

3.11 Pre-Sampling Calibration/Post-Sampling Calibration Check. The protocols executed at the beginning and end of each sampling day to bracket measurement readings with controlled performance checks.

3.12 Performance-Established Configuration. The EC cell and sampling system configuration that existed at the time that it initially met the performance requirements of this protocol.

4.0 INTERFERENCES.

When present in sufficient concentrations, NO and NO₂ are two gas species that have been reported to interfere with CO concentra-tion measurements. In the likelihood of this occurrence, it is the protocol user’s responsibility to employ and properly maintain an appropriate CO EC cell filter or scrubber for removal of these gases, as described in Section 6.2.12.

6.0 EQUIPMENT AND SUPPLIES.

6.1 What equipment do I need for the measurement system?

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

6.2 Measurement System Components.

6.2.1 Sample Probe. A single extraction-point probe constructed of glass, stainless steel or other non-reactive material, and of length sufficient to reach any designated sampling point. The sample probe must be designed to prevent plugging due to condensation or particulate matter.

6.2.2 Sample Line. Non-reactive tubing to transport the effluent from the sample probe to the EC cell.

6.2.3 Calibration Assembly (optional). A three-way valve assembly or equivalent to introduce calibration gases at ambient pres-sure at the exit end of the sample probe during calibration checks. The assembly must be designed such that only stack gas or cali-bration gas flows in the sample line and all gases flow through any gas path filters.

6.2.4 Particulate Filter (optional). Filters before the inlet of the EC cell to prevent accumu-lation of particulate material in the measurement system and extend the useful life of the components. All filters must be fabricated of materials that are non-reactive to the gas mixtures being sampled.

6.2.5 Sample Pump. A leak-free pump to pro-vide undiluted sample gas to the system at a flow rate sufficient to minimize the response time of the measurement system. If located upstream of the EC cells, the pump must be constructed of a material that is non-reactive to the gas mixtures being sampled.

6.2.6 Sample Flow Rate Monitoring. An ad-justable rotameter or equivalent device used
to adjust and maintain the sample flow rate through the analyzer as prescribed.

6.2.9 Sample Gas Manifold (optional). A manifold to divert a portion of the sample gas stream to the analyzer and the remainder to a by-pass discharge vent. The sample gas manifold may also include provisions for introducing calibration gases directly to the analyzer. The manifold must be constructed of a material that is non-reactive to the gas mixtures being sampled.

6.2.10 EC cell. A device containing one or more EC cells to determine the CO and O₂ concentrations in the sample gas stream. The EC cell(s) must meet the applicable performance specifications of Section 13 of this protocol.

6.2.11 Data Recorder. A strip chart recorder, computer or digital recorder to make a record of analyzer output data. The data recorder resolution (i.e., readability) must be no greater than 1 ppm for CO; 0.1 percent for O₂; and one degree (either °C or °F) for temperature. Alternatively, you may use a digital or analog meter having the same resolution to observe and manually record the analyzer responses.

6.2.12 Interference Gas Filter or Scrubber. A device to remove interfering compounds upstream of the CO EC cell. Specific interference gas filters or scrubbers used in the performance-established configuration of the analyzer must continue to be used. Such a filter or scrubber must have a means to determine when the removal agent is exhausted. Periodically replace or replenish it in accordance with the manufacturer’s recommendations.

7.0 REAGENTS AND STANDARDS. WHAT CALIBRATION GASES ARE NEEDED?

7.1 Calibration Gases. CO calibration gases for the EC cell must be CO in nitrogen or CO in a mixture of nitrogen and O₂. Use CO calibration gases with labeled concentration values certified by the manufacturer to be within ±5 percent of the label value. Dry ambient air (20.9 percent O₂) is acceptable for calibration of the O₂ cell. If needed, any lower percentage O₂ calibration gas must be a mixture of O₂ in nitrogen.

7.1.1 Up-Scale CO Calibration Gas Concentration. Choose one or more up-scale gas concentrations such that the average of the stack gas measurements for each stack gas sampling run are between 25 and 150 percent of those concentrations. Alternatively, choose an up-scale gas that does not exceed twice the concentration of the applicable outlet standard. If a measured gas value exceeds 150 percent of the up-scale CO calibration gas value at any time during the stack gas sampling run, the run must be discarded and repeated.

7.1.2 Up-Scale O₂ Calibration Gas Concentration. Select an O₂ gas concentration such that the difference between the gas concentration and the average stack gas measurement or reading for each sample run is less than 15 percent O₂. When the average exhaust gas O₂ readings are above 6 percent, you may use dry ambient air (20.9 percent O₂) for the up-scale O₂ calibration gas.

7.1.3 Zero Gas. Use an inert gas that contains less than 0.25 percent of the up-scale CO calibration gas concentration. You may use dry air that is free from ambient CO and other combustion gas products (e.g., CO₂).

8.0 SAMPLE COLLECTION AND ANALYSIS

8.1 Selection of Sampling Sites.

8.1.1 Control Device Inlet. Select a sampling site located at least two stack diameters downstream of any disturbance (e.g., turbocharger exhaust, crossover junction or recirculation take-off) and at least one-half stack diameter upstream of the gas discharge to the atmosphere. Use a single sampling extraction point near the center of the duct (e.g., within the 10 percent centroidal area), unless instructed otherwise.

8.1.2 Exhaust Gas Outlet. Select a sampling site located at least two stack diameters downstream of any disturbance (e.g., turbocharger exhaust, crossover junction or recirculation take-off) and at least one-half stack diameter upstream of the gas discharge to the atmosphere. Use a single sampling extraction point near the center of the duct (e.g., within the 10 percent centroidal area), unless instructed otherwise.

8.2 Stack Gas Collection and Analysis. Prior to the first stack gas sampling run, conduct the pre-sampling calibration in accordance with Section 10.1. Use Figure 1 to record all data. Zero the analyzer with zero gas. Confirm and record that the scrubber media color is correct and not exhausted. Then position the probe at the sampling point and begin the sampling run at the same flow rate used during the up-scale calibration. Record the start time. Record all EC cell output responses and the flow rate during the “sample conditioning phase” once per minute until constant readings are obtained. Then begin the “measurement data phase” and record readings every 15 seconds for at least two minutes (or eight readings), or as otherwise required to achieve two continuous minutes of data that meet the specification given in Section 13.1. Finally, perform the “refresh phase” by introducing dry air, free from CO and other combustion gases, until several minute-to-minute readings of consistent value have been obtained. For each run use the “measurement data phase” readings to calculate the average stack gas CO and O₂ concentrations.

8.3 EC Cell Rate. Maintain the EC cell sample flow rate so that it does not vary by more than ±10 percent throughout the pre-sampling calibration, stack gas sampling and post-sampling calibration check. Alternatively, the EC cell sample flow rate can be maintained within a tolerance range that...
Environmental Protection Agency

9.0 QUALITY CONTROL (RESERVED)

10.0 CALIBRATION AND STANDARDIZATION

10.1 Pre-Sampling Calibration. Conduct the following protocol once for each nominal range to be used on each EC cell before performing a stack gas sampling run on each field sampling day. Repeat the calibration if you replace an EC cell before completing all of the sampling runs. There is no prescribed order for calibration of the EC cells; however, each cell must complete the measurement data phase during calibration. Assemble the measurement system by following the manufacturer’s recommended protocols including for preparing and preconditioning the EC cell. Assure the measurement system has no leaks and verify the gas scrubbing agent is not depleted. Use Figure 1 to record all data.

10.1.1 Zero Calibration. For both the O₂ and CO cells, introduce zero gas to the measurement system (e.g., at the calibration assembly) and record the concentration reading every minute until readings are constant for at least two consecutive minutes. Include the time and sample flow rate. Repeat the steps in this section at least once to verify the zero calibration for each component gas.

10.1.2 Zero Calibration Tolerance. For each zero gas introduction, the zero level output must be less than or equal to ±2 percent of the up-scale gas value or ±1 ppm, whichever is less restrictive, for the CO channel and less than or equal to ±0.5 percent O₂ for the O₂ channel.

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

10.1.4 Up-Scale Calibration Error. The mean of the difference of the “measurement data phase” readings from the reported standard gas value must be less than or equal to ±5 percent or ±1 ppm for CO or ±0.5 percent O₂, whichever is less restrictive, respectively.

The maximum allowable deviation from the mean measured value of any single “measurement data phase” reading must be less than or equal to ±2 percent or ±1 ppm for CO or ±0.5 percent O₂, whichever is less restrictive, respectively.

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

11.0 ANALYTICAL PROCEDURE

The analytical procedure is fully discussed in Section 8.

12.0 CALCULATIONS AND DATA ANALYSIS

Determine the CO and O₂ concentrations for each stack gas sampling run by calculating the mean gas concentrations of the data recorded during the “measurement data phase”.

13.0 PROTOCOL PERFORMANCE

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

13.1 Measurement Data Phase Performance Check. Calculate the mean of the readings from the “measurement data phase”. The maximum allowable deviation from the mean for each of the individual readings is ±2 percent, or ±1 ppm, whichever is less restrictive. Record the mean value and maximum deviation for each gas monitored. Data must conform to Section 8.3. The EC cell flow rate must conform to the specification in Section 8.3.

Example: A measurement data phase is invalid if the maximum deviation of any single reading comprising that mean is greater than ±2 percent or ±1 ppm (the default criteria). For example, if the mean = 30 ppm, single readings of below 29 ppm and above 31 ppm are disallowed.

13.2 Interference Check. Before the initial use of the EC cell and interference gas scrubber in the field, and semi-annually thereafter, challenge the interference gas scrubber with NO and NO₂ gas standards that are
generally recognized as representative of diesel-fueled engine NO and NO₂ emission values. Record the responses displayed by the CO EC cell and other pertinent data on Figure 1 or a similar form.

13.2.1 Interference Response. The combined NO and NO₂ interference response should be less than or equal to ±5 percent of the up-scale CO calibration gas concentration.

13.3 Repeatability Check. Conduct the following check once for each nominal range that is to be used on the CO EC cell within 5 days prior to each field sampling program. If a field sampling program lasts longer than 5 days, repeat this check every 5 days. Immediately repeat the check if the EC cell is replaced or if the EC cell is exposed to gas concentrations greater than 150 percent of the highest up-scale gas concentration.

13.3.1 Repeatability Check Procedure. Perform a complete EC cell sampling run (all three phases) by introducing the CO calibration gas to the measurement system and record the response. Follow Section 10.1.3. Use Figure 1 to record all data. Repeat the run three times for a total of four complete runs. During the four repeatability check runs, do not adjust the system except where necessary to achieve the correct calibration gas flow rate at the analyzer.

13.3.2 Repeatability Check Calculations. Determine the highest and lowest average “measurement data phase” CO concentrations from the four repeatability check runs and record the results on Figure 1 or a similar form. The absolute value of the difference between the maximum and minimum average values recorded must not vary more than ±3 percent or ±1 ppm of the up-scale gas value, whichever is less restrictive.

17.0 REFERENCES
### Table 1: Appendix A—Sampling Run Data

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**Sample Cond. Phase:**

- Measurements
- Data Phase
- Mean
- Refresh

**Phase:**

- Time
- Scrub. OK
- Flow-Rate
§ 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 establishes 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 carbonate from water softening processes.

(b) An LMP is an establishment engaged in the manufacture of lime product (calcium oxide, calcium oxide with magnesium oxide, or dead burned dolomite) by calcination of limestone, dolomite, shells or other calcareous substances.

(c) A major source of HAP is a plant site that emits or has the potential to emit any single HAP at a rate of 9.07 megagrams (10 tons) or more per year or any combination of HAP at a rate of 22.68 megagrams (25 tons) or more per year from all emission sources at the plant site.

(b) [Reserved]

§ 63.7082 What parts of my plant does this subpart cover?

(a) This subpart applies to each existing or new lime kiln(s) and their associated lime cooler(s), and processed stone handling (PSH) operations system(s) located at an LMP that is a major source.

(b) A new lime kiln is a lime kiln, and (if applicable) its associated lime cooler, for which construction or reconstruction began after December 20, 2002, if you met the applicability criteria in §63.7081 at the time you began construction or reconstruction.

(c) A new PSH operations system is the equipment in paragraph (g) of this section, for which construction or reconstruction began after December 20, 2002, if you met the applicability criteria in §63.7081 at the time you began construction or reconstruction.

(d) A lime kiln or PSH operations system is reconstructed if it meets the criteria for reconstruction defined in §63.2.

(e) An existing lime kiln is any lime kiln, and (if applicable) its associated lime cooler, that does not meet the definition of a new kiln of paragraph (b) of this section.

(f) An existing PSH operations system is any PSH operations system that does not meet the definition of a new PSH operations system in paragraph (c) of this section.

(g) A PSH operations system includes all equipment associated with PSH operations beginning at the processed stone storage bin(s) or open storage pile(s) and ending where the processed stone is fed into the kiln. It includes man-made processed stone storage bins (but not open processed stone storage piles), conveying system transfer points, bulk loading or unloading systems, screening operations, surge bins, bucket elevators, and belt conveyors. No other materials processing operations are subject to this subpart.

(h) Nuisance dust collectors on lime coolers are part of the lime materials processing operations and are not covered by this subpart.

(i) Lime hydrators are not subject to this subpart.

(j) Open material storage piles are not subject to this subpart.

§ 63.7083 When do I have to comply with this subpart?

(a) If you have a new affected source, you must comply with this subpart according to paragraphs (a)(1) and (2) of this section.
(1) If you start up your affected source before January 5, 2004, you must comply with the emission limitations no later than January 5, 2004, and you must have completed all applicable performance tests no later than July 5, 2004.

(2) If you start up your affected source after January 5, 2004, then you must comply with the emission limitations for new affected sources upon startup of your affected source and you must have completed all applicable performance tests no later than 180 days after startup.

(b) If you have an existing affected source, you must comply with the applicable emission limitations for the existing affected source, and you must have completed all applicable performance tests no later than January 5, 2007.

(c) If you have an LMP that is an area source that increases its emissions or its potential to emit such that it becomes a major source of HAP, the deadlines specified in paragraphs (c)(1) and (2) of this section apply.

(1) New affected sources at your LMP you must be in compliance with this subpart upon startup.

(2) Existing affected sources at your LMP must be in compliance with this subpart within 3 years after your source becomes a major source of HAP.

(d) You must prepare and implement for each LMP, a written operations, maintenance, and monitoring (OM&M) plan. You must submit the plan to the applicable permitting authority for review and approval or each application for a 40 CFR part 70 or 40 CFR part 71 permit. Any subsequent changes to the plan must be submitted to the applicable permitting authority for review and approval. Pending approval by the applicable permitting authority of an initial or amended plan, you must comply with the provisions of the submitted plan. Each plan must contain the following information:

(1) Process and control device parameters to be monitored to determine compliance, along with established operating limits or ranges, as applicable, for each emission unit.

(2) A monitoring schedule for each emission unit.

(3) Procedures for the proper operation and maintenance of each emission unit and each air pollution control device used to meet the applicable emission limitations and operating limits in Tables 1 and 2 to this subpart, respectively.

(4) Procedures for the proper installation, operation, and maintenance of monitoring devices or systems used to determine compliance, including:

(i) Calibration and certification of accuracy of each monitoring device;

(ii) Performance and equipment specifications for the sample interface,
parametric signal analyzer, and the data collection and reduction systems; (iii) Ongoing operation and maintenance procedures in accordance with the general requirements of §63.8(c)(1), (3), and (4)(ii); and (iv) Ongoing data quality assurance procedures in accordance with the general requirements of §63.8(d).

(5) Procedures for monitoring process and control device parameters.

(6) Corrective actions to be taken when process or operating parameters or add-on control device parameters deviate from the operating limits specified in Table 2 to this subpart, including:

(i) Procedures to determine and record the cause of a deviation or excursion, and the time the deviation or excursion began and ended; and

(ii) Procedures for recording the corrective action taken, the time corrective action was initiated, and the time and date the corrective action was completed.

(7) A maintenance schedule for each emission unit and control device that is consistent with the manufacturer’s instructions and recommendations for routine and long-term maintenance.

(e) You must develop a written start-up, shutdown, and malfunction plan (SSMP) according to the provisions in §63.6(e)(3).


TESTING AND INITIAL COMPLIANCE REQUIREMENTS

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

(a) If you have an existing affected source, you must complete all applicable performance tests within January 5, 2007, according to the provisions in §§63.7(a)(2) and 63.7114.

(b) If you have a new affected source, and commenced construction or reconstruction between December 20, 2002, and January 5, 2004, you must demonstrate initial compliance with either the proposed emission limitation or the promulgated emission limitation no later than 180 calendar days after January 5, 2004 or within 180 calendar days after startup of the source, whichever is later, according to §§63.7(a)(2)(ix) and 63.7114.

(c) If you commenced construction or reconstruction between December 20, 2002, and January 5, 2004, and you chose to comply with the proposed emission limitation when demonstrating initial compliance, you must conduct a demonstration of compliance with the promulgated emission limitation within January 5, 2007 or after startup of the source, whichever is later, according to §§63.7(a)(2)(ix) and 63.7114.

(d) For each initial compliance requirement in Table 3 to this subpart that applies to you where the monitoring averaging period is 3 hours, the 3-hour period for demonstrating continuous compliance for emission units within existing affected sources at LMP begins at 12:01 a.m. on the compliance date for existing affected sources, that is, the day following completion of the initial compliance demonstration, and ends at 3:01 a.m. on the same day.

(e) For each initial compliance requirement in Table 3 to this subpart that applies to you where the monitoring averaging period is 3 hours, the 3-hour period for demonstrating continuous compliance for emission units within new or reconstructed affected sources at LMP begins at 12:01 a.m. on the day following completion of the initial compliance demonstration, as required in paragraphs (b) and (c) of this section, and ends at 3:01 a.m. on the same day.

§ 63.7111 When must I conduct subsequent performance tests?

You must conduct a performance test within 5 years following the initial performance test and within 5 years following each subsequent performance test thereafter.

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

(a) You must conduct each performance test in Table 4 to this subpart that applies to you.

(b) Each performance test must be conducted according to the requirements in §63.7(e)(1) and under the specific conditions specified in Table 4 to this subpart.
(c) You may not conduct performance tests during periods of startup, shutdown, or malfunction, as specified in §63.7(e)(1).

(d) Except for opacity and VE observations, 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) The emission rate of particulate matter (PM) from each lime kiln (and each lime cooler if there is a separate exhaust to the atmosphere from the lime cooler) must be computed for each run using Equation 1 of this section:

\[
E = \left( C_k Q_k + C_c Q_c \right) / PK \quad \text{(Eq. 1)}
\]

Where:
- \( E \) = Emission rate of PM, pounds per ton (lb/ton) of stone feed.
- \( C_k \) = Concentration of PM in the kiln effluent, grain/dry standard cubic feet (gr/dscf).
- \( Q_k \) = Volumetric flow rate of kiln effluent gas, dry standard cubic feet per hour (dscf/hr).
- \( C_c \) = Concentration of PM in the cooler effluent, grain/dscf. This value is zero if there is not a separate cooler exhaust to the atmosphere.
- \( Q_c \) = Volumetric flow rate of cooler effluent gas, dscf/hr. This value is zero if there is not a separate cooler exhaust to the atmosphere.
- \( P \) = Stone feed rate, tons per hour (ton/hr).
- \( K \) = Conversion factor, 7000 grains per pound (grains/lb).

(f)(1) If you choose to meet a weighted average emission limit as specified in item 4 of Table 1 to this subpart, you must calculate a combined particulate emission rate from all kilns and coolers within your LMP using Equation 2 of this section:

\[
E_T = \sum_{i=1}^{n} E_i P_i / \sum_{i=1}^{n} P_i \quad \text{(Eq. 2)}
\]

Where:
- \( E_i \) = Emission rate of PM from all kilns and coolers, lb/ton of stone feed.
- \( E_i \) = Emission rate of PM from kiln i, or from kiln/cooler combination i, lb/ton of stone feed.
- \( P_i \) = Stone feed rate to kiln i, ton/hr.
- \( n \) = Number of kilns you wish to include in averaging.

(2) You do not have to include every kiln in this calculation, only include kilns you wish to average. Kilns that have a PM emission limit of 0.60 lb/tsf are ineligible for any averaging.

(g) The weighted average PM emission limit from all kilns and coolers for which you are averaging must be calculated using Equation 3 of this section:

\[
E_{TN} = \frac{\sum_{j=1}^{m} E_j P_j / \sum_{j=1}^{m} P_j}{E_j} \quad \text{(Eq. 3)}
\]

Where:
- \( E_{TN} \) = Weighted average PM emission limit for all kilns and coolers being included in averaging at the LMP, lb/ton of stone feed.
- \( E_j \) = PM emission limit (0.10 or 0.12) for kiln j, or for kiln/cooler combination j, lb/ton of stone feed.
- \( P_j \) = Stone feed rate to kiln j, ton/hr.
- \( m \) = Number of kilns and kiln/cooler combinations you are averaging at your LMP. You must include the same kilns in the calculation of \( E_T \) and \( E_{TN} \). Kilns that have a PM emission limit of 0.60 lb/tsf are ineligible for any averaging.

(h) Performance test results must be documented in complete test reports that contain the information required by paragraphs (h)(1) through (10) of this section, as well as all other relevant information. The plan to be followed during testing must be made available to the Administrator at least 60 days prior to testing.

(1) A brief description of the process and the air pollution control system;
(2) Sampling location description(s);
(3) A description of sampling and analytical procedures and any modifications to standard procedures;
(4) Test results, including opacity;
(5) Quality assurance procedures and results;
(6) Records of operating conditions during the test, preparation of standards, and calibration procedures;
(7) Raw data sheets for field sampling and field and laboratory analyses;
(8) Documentation of calculations;
(9) All data recorded and used to establish operating limits; and
(10) Any other information required by the test method.

(i) [Reserved]

(j) You must establish any applicable 3-hour block average operating limit indicated in Table 2 to this subpart according to the applicable requirements.
in Table 3 to this subpart and paragraphs (j)(1) through (4) of this section.

(1) Continuously record the parameter during the PM performance test and include the parameter record(s) in the performance test report.

(2) Determine the average parameter value for each 15-minute period of each test run.

(3) Calculate the test run average for the parameter by taking the average of all the 15-minute parameter values for the run.

(4) Calculate the 3-hour operating limit by taking the average of the three test run averages.

(k) For each building enclosing any PSH operations that is subject to a VE limit, you must conduct a VE check according to item 18 in Table 4 to this subpart, and in accordance with paragraphs (k)(1) through (3) of this section.

(1) Conduct visual inspections that consist of a visual survey of the building over the test period to identify if there are VE, other than condensed water vapor.

(2) Select a position at least 15 but not more 1,320 feet from each side of the building with the sun or other light source generally at your back.

(3) The observer conducting the VE checks need not be certified to conduct EPA Method 9 in appendix A to part 60 of this chapter, but must meet the training requirements as described in EPA Method 22 in appendix A to part 60 of this chapter.

(l) When determining compliance with the opacity standards for fugitive emissions from PSH operations in item 7 of Table 1 to this subpart, you must conduct EPA Method 9 in appendix A to part 60 of this chapter according to item 17 in Table 4 to this subpart, and in accordance with paragraphs (l)(1) through (3) of this section.

(1) The minimum distance between the observer and the emission source shall be 4.57 meters (15 feet).

(2) The observer shall, when possible, select a position that minimizes interference from other fugitive emission sources (e.g., road dust). The required observer position relative to the sun must be followed.

(3) If you use wet dust suppression to control PM from PSH operations, a visible mist is sometimes generated by the spray. The water mist must not be confused with particulate matter emissions and is not to be considered VE. When a water mist of this nature is present, you must observe emissions at a point in the plume where the mist is no longer visible.

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

(a) You must install, operate, and maintain each continuous parameter monitoring system (CPMS) according to your OM&M plan required by §63.7100(d) and paragraphs (a)(1) through (5) of this section, and you must install, operate, and maintain each continuous opacity monitoring system (COMS) as required by paragraph (g) of this section.

(1) The CPMS must complete a minimum of one cycle of operation for each successive 15-minute period.

(2) To calculate a valid hourly value, you must have at least four equally spaced data values (or at least two, if that condition is included to allow for periodic calibration checks) for that hour from a CPMS that is not out of control according your OM&M plan, and use all valid data.

(3) To calculate the average for each 3-hour block averaging period, you must use all valid data, and you must have at least 66 percent of the hourly averages for that period using only hourly average values that are based on valid data (i.e., not from out-of-control periods).

(4) You must conduct a performance evaluation of each CPMS in accordance with your OM&M plan.

(5) You must continuously operate and maintain the CPMS according to the OM&M plan, including, but not limited to, maintaining necessary parts for routine repairs of the monitoring equipment.

(b) For each flow measurement device, you must meet the requirements in paragraphs (a)(1) through (5) and (b)(1) through (4) of this section.

(1) Use a flow sensor with a minimum tolerance of 2 percent of the flow rate.

(2) Reduce swirling flow or abnormal velocity distributions due to upstream and downstream disturbances.
Environmental Protection Agency

§ 63.7113

(3) Conduct a flow sensor calibration check at least semiannually.

(4) At least monthly, inspect all components for integrity, all electrical connections for continuity, and all mechanical connections for leakage.

(c) For each pressure measurement device, you must meet the requirements in paragraphs (a)(1) through (5) and (c)(1) through (7) of this section.

(1) Locate the pressure sensor(s) in or as close to as possible a position that provides a representative measurement of the pressure.

(2) Minimize or eliminate pulsating pressure, vibration, and internal and external corrosion.

(3) Use a gauge with a minimum tolerance of 0.5 inch of water or a transducer with a minimum tolerance of 1 percent of the pressure range.

(4) Check pressure tap pluggage daily.

(5) Using a manometer, check gauge calibration quarterly and transducer calibration monthly.

(6) Conduct calibration checks any time the sensor exceeds the manufacturer’s specified maximum operating pressure range or install a new pressure sensor.

(7) At least monthly, inspect all components for integrity, all electrical connections for continuity, and all mechanical connections for leakage.

(d) For each bag leak detection system (BLDS), you must meet any applicable requirements in paragraphs (a)(1) through (5) and (d)(1) through (8) of this section.

(1) The BLDS must be certified by the manufacturer to be capable of detecting PM emissions at concentrations of 10 milligrams per actual cubic meter (0.0044 grains per actual cubic foot) or less.

(2) The sensor on the BLDS must provide output of relative PM emissions.

(3) The BLDS must have an alarm that will sound automatically when it detects an increase in relative PM emissions greater than a preset level.

(4) The alarm must be located in an area where appropriate plant personnel will be able to hear it.

(5) For a positive-pressure fabric filter (FF), each compartment or cell must have a bag leak detector (BLD). For a negative-pressure or induced-air FF, the BLD must be installed downstream of the FF. If multiple BLD are required (for either type of FF), the detectors may share the system instrumentation and alarm.

(6) Bag leak detection systems must be installed, operated, adjusted, and maintained according to the manufacturer’s written specifications and recommendations. Standard operating procedures must be incorporated into the OM&M plan.

(7) At a minimum, initial adjustment of the system must consist of establishing the baseline output in both of the following ways:

(i) Adjust the range and the averaging period of the device.

(ii) Establish the alarm set points and the alarm delay time.

(8) After initial adjustment, the range, averaging period, alarm set points, or alarm delay time may not be adjusted except as specified in the OM&M plan required by § 63.7100(d). In no event may the range be increased by more than 100 percent or decreased by more than 50 percent over a 365-day period unless a responsible official, as defined in § 63.2, certifies in writing to the Administrator that the FF has been inspected and found to be in good operating condition.

(e) For each PM detector, you must meet any applicable requirements in paragraphs (a)(1) through (5) and (e)(1) through (8) of this section.

(1) The PM detector must be certified by the manufacturer to be capable of detecting PM emissions at concentrations of 10 milligrams per actual cubic meter (0.0044 grains per actual cubic foot) or less.

(2) The sensor on the PM detector must provide output of relative PM emissions.

(3) The PM detector must have an alarm that will sound automatically when it detects an increase in relative PM emissions greater than a preset level.

(4) The alarm must be located in an area where appropriate plant personnel will be able to hear it.

(5) For a positive-pressure electrostatic precipitator (ESP), each compartment must have a PM detector. For a negative-pressure or induced-air ESP, the BLD must be installed downstream of the ESP.
§ 63.7114 How do I demonstrate initial compliance with the emission limitations standard?

(a) You must demonstrate initial compliance with each emission limit in Table 1 to this subpart that applies to you, according to Table 3 to this subpart. For existing lime kilns and their associated coolers, you may perform VE measurements in accordance with EPA Method 9 of appendix A to part 60 in lieu of installing a COMS or PM detector if any of the conditions in paragraphs (a)(1) through (3) of this section exist:

(1) You use a FF for PM control, and the FF is under positive pressure and has multiple stacks; or

(2) The control device exhausts through a monovent; or

(3) The installation of a COMS in accordance with PS–1 of appendix B to part 60 is infeasible.

(b) You must establish each site-specific operating limit in Table 2 to this subpart that applies to you according to the requirements in §63.7112(j) and Table 4 to this subpart. Alternative parameters may be monitored if approval is obtained according to the procedures in §63.8(f).

(c) You must submit the Notification of Compliance Status containing the results of the initial compliance demonstration according to the requirements in §63.7130(e).

CONTINUOUS COMPLIANCE REQUIREMENTS

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

(a) You must monitor and collect data according to this section.

(b) Except for monitor malfunctions, associated repairs, required quality assurance or control activities (including, as applicable, calibration checks and required zero adjustments), and except for PSH operations subject to monthly VE testing, you must monitor continuously (or collect data at all required intervals) at all times that the emission unit is operating.

(c) Data recorded during the conditions described in paragraphs (c)(1)
Environmental Protection Agency

§ 63.7130 What notifications must I submit and when?

(a) You must submit all of the notifications in §§63.9(b)(1) through (5); 63.7(b)(1) through (3); 63.8(e); (f)(4) and (6); and 63.9(a) through (i) that apply to you, by the dates specified.

(b) As specified in §63.9(b)(2), if you start up your affected source before January 5, 2004, you must submit an initial notification not later than 120 calendar days after January 5, 2004.

(c) If you startup your new or reconstructed affected source on or after January 5, 2004, you must submit an initial notification not later than 120 calendar days after you start up your affected source.

(d) If you are required to conduct a performance test, you must submit a

§ 63.7131 How do I demonstrate continuous compliance with the emission limitations standard?

(a) You must demonstrate continuous compliance with each emission limitation in Tables 1 and 2 to this subpart that applies to you according to the methods specified in Tables 5 and 6 to this subpart.

(b) You must report each instance in which you did not meet each operating limit, opacity limit, and VE limit in Tables 2 and 6 to this subpart that applies to you. This includes periods of startup, shutdown, and malfunction. These instances are deviations from the emission limitations in this subpart. These deviations must be reported according to the requirements in §63.7131.

(c) [Reserved]

(d) Consistent with §§63.6(e) and 63.7(e)(1), deviations that occur during a period of startup, shutdown, or malfunction are not violations if you demonstrate to the Administrator’s satisfaction that you were operating in accordance with §63.6(e)(1). The Administrator will determine whether deviations that occur during a period of startup, shutdown, or malfunction are violations, according to the provisions in §63.6(e).

(e) For each PSH operation subject to an opacity limit as specified in Table 1 to this subpart, and any vents from buildings subject to an opacity limit, you must conduct a VE check according to item 1 in Table 6 to this subpart, and as follows:

(1) Conduct visual inspections that consist of a visual survey of each stack or process emission point over the test period to identify if there are VE, other than condensed water vapor.

(2) Select a position at least 15 but not more than 1,320 feet from the affected emission point with the sun or other light source generally at your back.

(3) The observer conducting the VE checks need not be certified to conduct EPA Method 9 in appendix A to part 60 of this chapter, but must meet the training requirements as described in EPA Method 22 of appendix A to part 60 of this chapter.

(f) For existing lime kilns and their associated coolers, you may perform VE measurements in accordance with EPA Method 9 of appendix A to part 60 in lieu of installing a COMS or PM detector if any of the conditions in paragraphs (f)(1) or (3) of this section exist:

(1) You use a FF for PM control, and the FF is under positive pressure and has multiple stacks; or

(2) The control device exhausts through a monovent; or

(3) The installation of a COMS in accordance with PS-1 of appendix B to part 60 is infeasible.

§ 63.7131 Notification of intent to conduct a performance test at least 60 calendar days before the performance test is scheduled to begin, as required in §63.7(b)(1).

(e) If you are required to conduct a performance test, design evaluation, opacity observation, VE observation, or other initial compliance demonstration as specified in Table 3 or 4 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 3 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 calendar day following the completion of the initial compliance demonstration.

(2) For each compliance demonstration required in Table 5 to this subpart that includes a performance test conducted according to the requirements in Table 4 to this subpart, you must submit the Notification of Compliance Status, including the performance test results, before the close of business on the 30th calendar day following the completion of the performance test according to §63.10(d)(2).

§ 63.7131 What reports must I submit and when?

(a) You must submit each report listed in Table 7 to 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 specified in Table 7 to this subpart and according to the requirements in paragraphs (b)(1) through (5) of this section:

(1) The first compliance report must cover the period beginning on the compliance date that is specified for your affected source in §63.7083 and ending on June 30 or December 31, whichever date is the first date following the end of the first half calendar year after the compliance date that is specified for your affected source in §63.7083.

(2) The first 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.

(3) 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) 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 affected source that is subject to permitting regulations pursuant to part 70 or part 71 of this chapter, if the permitting authority has established dates for submitting semiannual reports pursuant to §§70.6(a)(3)(iii)(A) or 71.6(a)(3)(iii)(A) of this chapter, you may submit the first and subsequent compliance reports according to the dates the permitting authority has established instead of according to the dates specified in paragraphs (b)(1) through (4) of this section.

(c) The compliance report must contain the information specified 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 truth, accuracy, and completeness of the content of the report.

(3) Date of report and beginning and ending dates of the reporting period.

(4) If you had a startup, shutdown or malfunction during the reporting period and you took actions consistent with your SSMP, the compliance report must include the information in §63.10(d)(5)(i).

(5) If there were no deviations from any emission limitations (emission limit, operating limit, opacity limit, and VE limit) that apply to you, the compliance report must include a statement that there were no deviations from the emission limitations during the reporting period.

(6) If there were no periods during which the continuous monitoring systems (CMS) were out-of-control as specified in §63.8(c)(7), a statement that there were no periods during which the CMS were out-of-control during the reporting period.
Environmental Protection Agency

§ 63.7132

(d) For each deviation from an emission limitation (emission limit, operating limit, opacity limit, and VE limit) that occurs at an affected source where you are not using a CMS to comply with the emission limitations in this subpart, the compliance report must contain the information specified in paragraphs (c)(1) through (4) and (d)(1) and (2) of this section. The deviations must be reported in accordance with the requirements in §63.10(d).

1. The total operating time of each emission unit 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 limitation (emission limit, operating limit, opacity limit, and VE limit) occurring at an affected source where you are using a CMS to comply with the emission limitation in this subpart, you must include the information specified in paragraphs (c)(1) through (4) and (e)(1) through (11) of this section. This includes periods of startup, shutdown, and malfunction.

1. The date and time that each malfunction started and stopped.

2. The date and time 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 startup, shutdown, or malfunction or during another period.

5. A summary of the total duration of the deviations during the reporting period and the total duration as a percent of the total affected 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 startup, shutdown, 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 emission unit operating time during that reporting period.

8. A brief description of the process units.

9. A brief description of the CMS.

10. The date of the latest CMS certification or audit.

11. A description of any changes in CMS, processes, or controls since the last reporting period.

(f) Each facility that has obtained a title V operating permit pursuant to part 70 or part 71 of this chapter must report all deviations as defined in this subpart in the semiannual monitoring report required by §§70.6(a)(3)(ii)(A) or 71.6(a)(3)(ii)(A) of this chapter. If you submit a compliance report specified in Table 7 to this subpart along with, or as part of, the semiannual monitoring report required by §§70.6(a)(3)(ii)(A) or 71.6(a)(3)(ii)(A) of this chapter, and the compliance report includes all required information concerning deviations from any emission limitation (including any operating limit), 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 you may have to report deviations from permit requirements to the permit authority.

§ 63.7132 What records must I keep?

(a) You must keep the records specified in paragraphs (a)(1) through (3) 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 requirements in §63.10(b)(2)(xvi).

2. The records in §63.6(e)(3)(iii) through (v) related to startup, shutdown, and malfunction.

3. Records of performance tests, performance evaluations, and opacity and VE observations as required in §63.10(b)(2)(viii).

(b) You must keep the records in §63.6(h)(5) for VE observations.

(c) You must keep the records required by Tables 5 and 6 to this subpart to show continuous compliance with
§ 63.7133 In what form and for 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 onsite for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to §63.10(b)(1). You may keep the records offsite for the remaining 3 years.

OTHER REQUIREMENTS AND INFORMATION

§ 63.7140 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. When there is overlap between subpart A and subpart AAAAA, as indicated in the “Explanations” column in Table 8, subpart AAAAA takes precedence.

§ 63.7141 Who implements and enforces this subpart?
(a) This subpart can be implemented and enforced by us, the U.S. EPA, or by 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 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 subpart E of this part, 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)(1) The authorities that will not be delegated to State, local, or tribal agencies are as specified in paragraphs (c)(1) through (6) of this section.

(1) Approval of alternatives to the non-opacity emission limitations in §63.7090(a).
(2) Approval of alternative opacity emission limitations in §63.7090(a).
(3) Approval of alternatives to the operating limits in §63.7090(b).
(4) Approval of major alternatives to test methods under §63.7(e)(2)(ii) and (f) and as defined in §63.90.
(5) Approval of major alternatives to monitoring under §63.8(f) and as defined in §63.90.
(6) Approval of major alternatives to recordkeeping and reporting under §63.10(f) and as defined in §63.90.

§ 63.7142 What are the requirements for claiming area source status?
(a) If you wish to claim that your LMP is an area source, you must measure the emissions of hydrogen chloride from all lime kilns, except as provided in paragraph (c) of this section, at your plant using either:

(1) EPA Method 320 of appendix A to this part,
(2) EPA Method 321 of appendix A to this part, or
(3) ASTM Method D6735–01, Standard Test Method for Measurement of Gaseous Chlorides and Fluorides from Mineral Calcining Exhaust Sources—Impinger Method, provided that the provisions in paragraphs (a)(3)(i) through (vi) of this section are followed.

(i) A test must include three or more runs in which a pair of samples is obtained simultaneously for each run according to section 11.2.6 of ASTM Method D6735–01.
(ii) You must calculate the test run standard deviation of each set of paired samples to quantify data precision, according to Equation 1 of this section:

80
RSD_a = (100) Absolute Value \left[ \frac{C_{1_a} - C_{2_a}}{C_{1_a} + C_{2_a}} \right] \quad (Eq. 1)

Where:
- \( RSD_a \) = The test run relative standard deviation of sample pair a, percent.
- \( C_{1_a} \) and \( C_{2_a} \) = The HCl concentrations, milligram/dry standard cubic meter (mg/dscm), from the paired samples.

(iii) You must calculate the test average relative standard deviation according to Equation 2 of this section:

\[ RSD_{TA} = \frac{\sum_{a=1}^{p} RSD_a}{p} \quad (Eq. 2) \]

Where:
- \( RSD_{TA} \) = The test average relative standard deviation, percent.
- \( RSD_a \) = The test run relative standard deviation for sample pair a.
- \( p \) = The number of test runs, \( \geq 3 \).

(iv) If \( RSD_{TA} \) is greater than 20 percent, the data are invalid and the test must be repeated.

(v) The post-test analyte spike procedure of section 11.2.7 of ASTM Method D6735–01 is conducted, and the percent recovery is calculated according to section 12.6 of ASTM Method D6735–01.

(vi) If the percent recovery is between 70 percent and 130 percent, inclusive, the test is valid. If the percent recovery is outside of this range, the data are considered invalid, and the test must be repeated.

(b) If you conduct tests to determine the rates of emission of specific organic HAP from lime kilns at LMP for use in applicability determinations under § 63.7081, you may use either:

(1) Method 320 of appendix A to this part, or
(2) Method 18 of appendix A to part 60 of this chapter, or
(3) ASTM D6420–99, Standard Test Method for Determination of Gaseous Organic Compounds by Direct Interface Gas Chromatography-Mass Spectrometry (GC/MS), provided that the provisions of paragraphs (b)(3)(i) through (iv) of this section are followed:

(i) The target compound(s) are those listed in section 1.1 of ASTM D6420–99;
(ii) The target concentration is between 150 parts per billion by volume and 100 parts per million by volume;
(iii) For target compound(s) not listed in Table 1.1 of ASTM D6420–99, but potentially detected by mass spectrometry, the additional system continuing calibration check after each run, as detailed in section 10.5.3 of ASTM D6420–99, is conducted, met, documented, and submitted with the data report, even if there is no moisture condenser used or the compound is not considered water soluble; and
(iv) For target compound(s) not listed in Table 1.1 of ASTM D6420–99, and not amenable to detection by mass spectrometry, ASTM D6420–99 may not be used.

(c) It is left to the discretion of the permitting authority whether or not idled kilns must be tested for (HCl) to claim area source status. If the facility has kilns that use common feed materials and fuel, are essentially identical in design, and use essentially identical emission controls, the permitting authority may also determine if one kiln can be tested, and the HCl emissions for the other essentially identical kilns be estimated from that test.

§ 63.7143 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:

Bag leak detector system (BLDS) is a type of PM detector used on FF to identify an increase in PM emissions resulting from a broken filter bag or other malfunction and sound an alarm.

Belt conveyor means a conveying device that transports processed stone from one location to another by means of an endless belt that is carried on a series of idlers and routed around a pulley at each end.

Bucket elevator means a processed stone conveying device consisting of a head and foot assembly which supports and drives an endless single or double
strand chain or belt to which buckets are attached.

Building means any frame structure with a roof.

Capture system means the equipment (including enclosures, hoods, ducts, fans, dampers, etc.) used to capture and transport PM to a control device.

Control device means the air pollution control equipment used to reduce PM emissions released to the atmosphere from one or more process operations at an LMP.

Conveying system means a device for transporting processed stone from one piece of equipment or location to another location within a plant. Conveying systems include but are not limited to feeders, belt conveyors, bucket elevators and pneumatic systems.

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 (including any operating limit);

(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 (including any operating limit) in this subpart during startup, shutdown, or malfunction, regardless of whether or not such failure is allowed by this subpart.

Emission limitation means any emission limit, opacity limit, operating limit, or VE limit.

Emission unit means a lime kiln, lime cooler, storage bin, conveying system transfer point, bulk loading or unloading operation, bucket elevator or belt conveyor at an LMP.

Fugitive emission means PM that is not collected by a capture system.

Hydrator means the device used to produce hydrated lime or calcium hydroxide via the chemical reaction of the lime product with water.

Lime cooler means the device external to the lime kiln (or part of the lime kiln itself) used to reduce the temperature of the lime produced by the kiln.

Lime kiln means the device, including any associated preheater, used to produce a lime product from stone feed by calcination. Kiln types include, but are not limited to, rotary kiln, vertical kiln, rotary hearth kiln, double-shaft vertical kiln, and fluidized bed kiln.

Lime manufacturing plant (LMP) means any plant which uses a lime kiln to produce lime product from limestone or other calcareous material by calcination.

Lime product means the product of the lime kiln calcination process including, calcitic lime, dolomitic lime, and dead-burned dolomite.

Limestone means the material comprised primarily of calcium carbonate (referred to sometimes as calcitic or high calcium limestone), magnesium carbonate, and/or the double carbonate of both calcium and magnesium (referred to sometimes as dolomitic limestone or dolomite).

Monovent means an exhaust configuration of a building or emission control device (e.g., positive pressure FF) that extends the length of the structure and has a width very small in relation to its length (i.e., length-to-width ratio is typically greater than 5:1). The exhaust may be an open vent with or without a roof, louvered vents, or a combination of such features.

Particulate matter (PM) detector means a system that is continuously capable of monitoring PM loading in the exhaust of FF or ESP in order to detect bag leaks, upset conditions, or control device malfunctions and sounds an alarm at a preset level. A PM detector system includes, but is not limited to, an instrument that operates on triboelectric, light scattering, light transmittance, or other effects to continuously monitor relative particulate loadings. A BLDS is a type of PM detector.

Positive pressure FF or ESP means a FF or ESP with the fan(s) on the upstream side of the control device.

Process stone handling operations means the equipment and transfer points between the equipment used to transport processed stone, and includes, storage bins, conveying system transfer points, bulk loading or unloading
Environmental Protection Agency

systems, screening operations, bucket elevators, and belt conveyors.

*Processed stone* means limestone or other calcareous material that has been processed to a size suitable for feeding into a lime kiln.

*Screening operation* means a device for separating material according to size by passing undersize material through one or more mesh surfaces (screens) in series and retaining oversize material on the mesh surfaces (screens).

*Stack emissions* means the PM that is released to the atmosphere from a capture system or control device.

*Storage bin* means a manmade enclosure for storage (including surge bins) of processed stone prior to the lime kiln.

*Transfer point* means a point in a conveying operation where the material is transferred to or from a belt conveyor.

*Vent* means an opening through which there is mechanically induced air flow for the purpose of exhausting from a building air carrying PM emissions from one or more emission units.

**TABLE 1 TO SUBPART AAAAA OF PART 63—EMISSION LIMITS**

As required in §63.7090(a), you must meet each emission limit in the following table that applies to you.

<table>
<thead>
<tr>
<th>For . . .</th>
<th>You must meet the following emission limit</th>
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<tbody>
<tr>
<td>1. Existing lime kilns and their associated lime coolers that did not have a wet scrubber installed and operating prior to January 5, 2004.</td>
<td>PM emissions must not exceed 0.12 pounds per ton of stone feed (lb/tsf).</td>
</tr>
<tr>
<td>2. Existing lime kilns and their associated lime coolers that have a wet scrubber, where the scrubber itself was installed and operating prior to January 5, 2004.</td>
<td>PM emissions must not exceed 0.60 lb/tsf. If at any time after January 5, 2004 the kiln changes to a dry control system, then the PM emission limit in item 1 of this Table 1 applies, and the kiln is hereafter ineligible for the PM emission limit in item 2 of this Table 1 regardless of the method of PM control.</td>
</tr>
<tr>
<td>3. New lime kilns and their associated lime coolers</td>
<td>PM emissions must not exceed 0.10 lb/tsf.</td>
</tr>
<tr>
<td>4. All existing and new lime kilns and their associated coolers at your LMP, and you choose to average PM emissions, except that any kiln that is allowed to meet the 0.60 lb/tsf PM emission limit is ineligible for averaging.</td>
<td>Weighted average PM emissions calculated according to Eq. 2 in §63.7112 must not exceed 0.12 lb/tsf (if you are averaging only existing kilns) or 0.10 lb/tsf (if you are averaging only new kilns). If you are averaging existing and new kilns, your weighted average PM emissions must not exceed the weighted average emission limit calculated according to Eq. 3 in §63.7112, except that no new kiln and its associated cooler considered alone may exceed an average PM emissions limit of 0.10 lb/tsf.</td>
</tr>
<tr>
<td>5. Stack emissions from all PSH operations at a new or existing affected source.</td>
<td>PM emissions must not exceed 0.05 grams per dry standard cubic meter (g/dscm).</td>
</tr>
<tr>
<td>6. Stack emissions from all PSH operations at a new or existing affected source, unless the stack emissions are discharged through a wet scrubber control device.</td>
<td>Emissions must not exceed 7 percent opacity.</td>
</tr>
<tr>
<td>7. Fugitive emissions from all PSH operations at a new or existing affected source, except as provided by item 8 of this Table 1.</td>
<td>Emissions must not exceed 7 percent opacity.</td>
</tr>
<tr>
<td>8. All PSH operations at a new or existing affected source enclosed in a building.</td>
<td>All of the individually affected PSH operations must comply with the applicable PM and opacity emission limitations in items 5 through 7 of this Table 1, or the building must comply with the following: There must be no VE from the building, except from a vent; and vent emissions must not exceed the stack emissions limitations in items 5 and 6 of this Table 1.</td>
</tr>
<tr>
<td>9. Each FF that controls emissions from only an individual, enclosed storage bin.</td>
<td>Emissions must not exceed 7 percent opacity.</td>
</tr>
<tr>
<td>10. Each set of multiple storage bins at a new or existing affected source, with combined stack emissions.</td>
<td>You must comply with the emission limits in items 5 and 6 of this Table 1.</td>
</tr>
</tbody>
</table>
TABLE 2 TO SUBPART AAAAA OF PART 63—OPERATING LIMITS

As required in §63.7090(b), you must meet each operating limit in the following table that applies to you.

<table>
<thead>
<tr>
<th>For . . .</th>
<th>You must . . .</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Each lime kiln and each lime cooler (if there is a separate exhaust to the atmosphere from the associated lime cooler) equipped with an FF.</td>
<td>Maintain and operate the FF such that the BLDS or PM detector alarm condition does not exist for more than 5 percent of the total operating time in a 6-month period; and comply with the requirements in §63.7113(d) through (f) and Table 5 to this subpart. In lieu of a BLDS or PM detector maintain the FF such that the 6-minute average opacity for any 6-minute block period does not exceed 15 percent; and comply with the requirements in §63.7113(f) and (g) and Table 5 to this subpart.</td>
</tr>
<tr>
<td>2. Each lime kiln equipped with a wet scrubber</td>
<td>Maintain the 3-hour block exhaust gas stream pressure drop across the wet scrubber greater than or equal to the pressure drop operating limit established during the most recent PM performance test; and maintain the 3-hour block scrubbing liquid flow rate greater than the flow rate operating limit established during the most recent performance test.</td>
</tr>
<tr>
<td>3. Each lime kiln equipped with an electrostatic precipitator</td>
<td>Install a PM detector and maintain and operate the ESP such that the PM detector alarm is not activated and alarm condition does not exist for more than 5 percent of the total operating time in a 6-month period, and comply with §63.7113(e); or, maintain the ESP such that the 6-minute average opacity for any 6-minute block period does not exceed 15 percent, and comply with the requirements in §63.7113(f) and (g); and comply with the requirements in §63.7113(f) and Table 5 to this subpart.</td>
</tr>
<tr>
<td>4. Each PSH operation subject to a PM limit which uses a wet scrubber.</td>
<td>Maintain the 3-hour block average exhaust gas stream pressure drop across the wet scrubber greater than or equal to the pressure drop operating limit established during the PM performance test; and maintain the 3-hour block average scrubbing liquid flow rate greater than or equal to the flow rate operating limit established during the performance test.</td>
</tr>
<tr>
<td>5. All affected sources</td>
<td>Prepare a written OM&amp;M plan; the plan must include the items listed in §63.7100(d) and the corrective actions to be taken when required in Table 5 to this subpart.</td>
</tr>
<tr>
<td>6. Each emission unit equipped with an add-on air pollution control device.</td>
<td>a. Vent captured emissions through a closed system, except that dilution air may be added to emission streams for the purpose of controlling temperature at the inlet to an FF; and b. Operate each capture/collection system according to the procedures and requirements in the OM&amp;M plan.</td>
</tr>
</tbody>
</table>
As required in §63.7114, you must demonstrate initial compliance with each emission limit that applies to you, according to the following table.

<table>
<thead>
<tr>
<th>For the following emission limit . . .</th>
<th>You have demonstrated initial compliance, if after following the requirements in §63.7112 . . .</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. All new or existing lime kilns and their associated lime coolers (kilns/coolers). PM emissions must not exceed 0.12 lb/tsf for all existing kilns/coolers with dry controls, 0.60 lb/tsf for existing kilns/coolers with wet scrubbers, 0.10 lb/tsf for all new kilns/coolers, or a weighted average calculated according to Eq. 3 in §63.7112. The kiln outlet PM emissions (and if applicable, summed with the separate cooler PM emissions), based on the PM emissions measured using Method 5 in appendix A to part 60 of this chapter and the stone feed rate measurement over the period of initial performance test, do not exceed the emission limit; if the lime kiln is controlled by an FF or ESP and you are opting to monitor PM emissions with a BLD, PM detector, you have installed and are operating the monitoring device according to the requirements in §63.7113(d) or (e), respectively; and if the lime kiln is controlled by an FF or ESP and you are opting to monitor PM emissions using a COMS, you have installed and are operating the COMS according to the requirements in §63.7113(g).</td>
<td></td>
</tr>
<tr>
<td>2. Stack emissions from all PHS operations at a new or existing affected source. PM emissions must not exceed 0.05 g/dscm. The outlet PM emissions, based on Method 5 or Method 17 in appendix A to part 60 of this chapter, over the period of the initial performance test do not exceed 0.05 g/dscm; and if the emission unit is controlled with a wet scrubber, you have a record of the scrubber’s pressure drop and liquid flow rate operating parameters over the 3-hour performance test during which emissions did not exceed the emissions limitation.</td>
<td></td>
</tr>
<tr>
<td>3. Stack emissions from all PSH operations at a new or existing affected source, unless the stack emissions are discharged through a wet scrubber control device. Emissions must not exceed 7 percent opacity. Each of the thirty 6-minute opacity averages during the initial compliance period, using Method 9 in appendix A to part 60 of this chapter, does not exceed the 7 percent opacity limit. At least thirty 6-minute averages must be obtained.</td>
<td></td>
</tr>
<tr>
<td>4. Fugitive emissions from all PSH operations at a new or existing affected source. Emissions must not exceed 10 percent opacity. Each of the 6-minute opacity averages during the initial compliance period, using Method 9 in appendix A to part 60 of this chapter, does not exceed the 10 percent opacity limit.</td>
<td></td>
</tr>
<tr>
<td>5. All PSH operations at a new or existing affected source, enclosed in building. All of the individually affected PSH operations must comply with the applicable PM and opacity emission limitations for items 2 through 4 of this Table 3, or the building must comply with the following: There must be no VE from the building, except from a vent, and vent emissions must not exceed the emission limitations in items 2 and 3 of this Table 3. All the PSH operations enclosed in the building have demonstrated initial compliance according to the applicable requirements for items 2 through 4 of this Table 3; or if you are complying with the building emission limitations, there are no VE from the building according to item 18 of Table 4 to this subpart and §63.7110(k), and you demonstrate initial compliance with applicable building vent emissions limitations according to the requirements in items 2 and 3 of this Table 3.</td>
<td></td>
</tr>
<tr>
<td>6. Each FF that controls emissions from only an individual storage bin. Emissions must not exceed 7 percent opacity. Each of the ten 6-minute averages during the 1-hour initial compliance period, using Method 9 in appendix A to part 60 of this chapter, does not exceed the 7 percent opacity limit.</td>
<td></td>
</tr>
</tbody>
</table>
For . . . | For the following emission limit . . . | You have demonstrated initial compliance, if after following the requirements in §63.7112 . . . | You demonstrate initial compliance according to the requirements in items 2 and 3 of this Table 3.
---|---|---|---
7. Each set of multiple storage bins with combined stack emissions. | You must comply with emission limitations in items 2 and 3 of this Table 3. | Method 1 or 1A of appendix A to part 60 of this chapter; and §63.6(d)(1)(i)). | Not applicable.

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

As required in §63.7112, you must conduct each performance test in the following table that applies to you.

<table>
<thead>
<tr>
<th>For . . .</th>
<th>You must . . .</th>
<th>Using . . .</th>
<th>According to the following requirements . . .</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Each lime kiln and each associated lime cooler, if there is a separate exhaust to the atmosphere from the associated lime cooler.</td>
<td>Select the location of the sampling port and the number of traverse ports.</td>
<td>Method 1 or 1A of appendix A to part 60 of this chapter; and §63.6(d)(1)(i)).</td>
<td>Sampling sites must be located at the outlet of the control device(s) and prior to any releases to the atmosphere.</td>
</tr>
<tr>
<td>2. Each lime kiln and each associated lime cooler, if there is a separate exhaust to the atmosphere from the associated lime cooler.</td>
<td>Determine velocity and volumetric flow rate.</td>
<td>Method 2, 2A, 2C, 2D, 2F, or 2G in appendix A to part 60 of this chapter.</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>3. Each lime kiln and each associated lime cooler, if there is a separate exhaust to the atmosphere from the associated lime cooler.</td>
<td>Conduct gas molecular weight analysis.</td>
<td>Method 3, 3A, or 3B in appendix A to part 60 of this chapter.</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>4. Each lime kiln and each associated lime cooler, if there is a separate exhaust to the atmosphere from the associated lime cooler.</td>
<td>Measure moisture content of the stack gas.</td>
<td>Method 4 in appendix A to part 60 of this chapter.</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>5. Each lime kiln and each associated lime cooler, if there is a separate exhaust to the atmosphere from the associated lime cooler, and which uses a negative pressure PM control device.</td>
<td>Measure PM emissions . . . .</td>
<td>Method 5 in appendix A to part 60 of this chapter.</td>
<td>Conduct the test(s) when the source is operating at representative operating conditions in accordance with §63.7(e); the minimum sampling volume must be 0.85 dry standard cubic meter (dscm) (30 dry standard cubic foot (dscf)); if there is a separate lime cooler exhaust to the atmosphere, you must conduct the Method 5 test of the separate cooler exhaust concurrently with the kiln exhaust test.</td>
</tr>
<tr>
<td>6. Each lime kiln and each associated lime cooler, if there is a separate exhaust to the atmosphere from the associated lime cooler, and which uses a positive pressure FF or ESP.</td>
<td>Measure PM emissions . . .</td>
<td>Method 5D in appendix A to part 60 of this chapter.</td>
<td>Conduct the test(s) when the source is operating at representative operating conditions in accordance with §63.7(e); if there is a separate lime cooler exhaust to the atmosphere, you must conduct the Method 5 test of the separate cooler exhaust concurrently with the kiln exhaust test.</td>
</tr>
<tr>
<td>7. Each lime kiln . . . . . . . . . .</td>
<td>Determine the mass rate of stone feed to the kiln during the kiln PM emissions test.</td>
<td>Any suitable device . . .</td>
<td>Calibrate and maintain the device according to manufacturer’s instructions; the measuring device used must be accurate to within ±5 percent of the mass rate of stone feed over its operating range.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>8. Each lime kiln equipped with a wet scrubber.</td>
<td>Establish the operating limit for the average gas stream pressure drop across the wet scrubber.</td>
<td>Data for the gas stream pressure drop measurement device during the kiln PM performance test.</td>
<td>The continuous pressure drop measurement device must be accurate within plus or minus 1 percent; you must collect the pressure drop data during the period of the performance test and determine the operating limit according to §63.7112(j).</td>
</tr>
<tr>
<td>9. Each lime kiln equipped with a wet scrubber.</td>
<td>Establish the operating limit for the average liquid flow rate to the scrubber.</td>
<td>Data from the liquid flow rate measurement device during the kiln PM performance test.</td>
<td>The continuous scrubbing liquid flow rate measuring device must be accurate within plus or minus 1 percent; you must collect the flow rate data during the period of the performance test and determine the operating limit according to §63.7112(j).</td>
</tr>
<tr>
<td>10. Each lime kiln equipped with a FF or ESP that is monitored with a PM detector.</td>
<td>Have installed and have operating the BLDs or PM detector prior to the performance test.</td>
<td>Standard operating procedures incorporated into the OM&amp;M plan.</td>
<td>According to the requirements in §63.7113(d) or (e), respectively.</td>
</tr>
<tr>
<td>11. Each lime kiln equipped with a FF or ESP that is monitored with a COMS.</td>
<td>Have installed and have operating the COMS prior to the performance test.</td>
<td>Standard operating procedures incorporated into the OM&amp;M plan and as required by 40 CFR part 63, subpart A, General Provisions and according to PS-1 of appendix B to part 60 of this chapter, except as specified in §63.7113(g)(2).</td>
<td>According to the requirements in §63.7113(g).</td>
</tr>
<tr>
<td>12. Each stack emission from a PSH operation, vent from a building enclosing a PSH operation, or set of multiple storage bins with combined stack emissions, which is subject to a PM emission limit.</td>
<td>Measure PM emissions ......</td>
<td>Method 5 or Method 17 in appendix A to part 60 of this chapter.</td>
<td>The sample volume must be at least 1.70 dscm (60 dscf); for Method 5, if the gas stream being sampled is at ambient temperature, the sampling probe and filter may be operated without heaters; and if the gas stream is above ambient temperature, the sampling probe and filter may be operated at a temperature high enough, but no higher than 121 °C (250 °F), to prevent water condensation on the filter (Method 17 may be used only with exhaust gas temperatures not more than 250 °F).</td>
</tr>
<tr>
<td>13. Each stack emission from a PSH operation, vent from a building enclosing a PSH operation, or set of multiple storage bins with combined stack emissions, which is subject to an opacity limit.</td>
<td>Conduct opacity observations</td>
<td>Method 9 in appendix A to part 60 of this chapter.</td>
<td>The test duration must be for at least 3 hours and you must obtain at least thirty, 6-minute averages.</td>
</tr>
<tr>
<td>14. Each stack emissions source from a PSH operation subject to a PM or opacity limit, which uses a wet scrubber.</td>
<td>Establish the average gas stream pressure drop across the wet scrubber.</td>
<td>Data for the gas stream pressure drop measurement device during the PSH operation stack PM performance test.</td>
<td>The pressure drop measurement device must be accurate within plus or minus 1 percent; you must collect the pressure drop data during the period of the performance test and determine the operating limit according to §63.7112(j).</td>
</tr>
</tbody>
</table>
### 40 CFR Ch. I (7–1–16 Edition)

#### Pt. 63, Subpt. AAAAA, Table 5

<table>
<thead>
<tr>
<th>For . . .</th>
<th>You must . . .</th>
<th>Using . . .</th>
<th>According to the following requirements . . .</th>
</tr>
</thead>
<tbody>
<tr>
<td>15. Each stack emissions source from a PSH operation subject to a PM or opacity limit, which uses a wet scrubber.</td>
<td>Establish the operating limit for the average liquid flow rate to the scrubber.</td>
<td>Data from the liquid flow rate measurement device during the PSH operation stack PM performance test.</td>
<td>The continuous scrubbing liquid flow rate measuring device must be accurate within ±1 percent; you must collect the flow rate data during the period of the performance test and determine the operating limit according to §63.7112(j).</td>
</tr>
<tr>
<td>16. Each FF that controls emissions from only an individual, enclosed, new or existing storage bin.</td>
<td>Conduct opacity observations</td>
<td>Method 9 in appendix A to part 60 of this chapter.</td>
<td>The test duration must be for at least 1 hour and you must obtain ten 6-minute averages.</td>
</tr>
<tr>
<td>17. Fugitive emissions from any PSH operation subject to an opacity limit.</td>
<td>Conduct opacity observations</td>
<td>Method 9 in appendix A to part 60 of this chapter.</td>
<td>The test duration must be for at least 3 hours, but the 3-hour test may be reduced to 1 hour if, during the first 1-hour period, there are no individual readings greater than 10 percent opacity and there are no more than three readings of 10 percent during the first 1-hour period.</td>
</tr>
<tr>
<td>18. Each building enclosing any PSH operation, that is subject to a VE limit.</td>
<td>Conduct VE check</td>
<td>The specifications in §63.7112(k).</td>
<td>The performance test must be conducted while all affected PSH operations within the building are operating; the performance test for each affected building must be at least 75 minutes, with each side of the building and roof being observed for at least 15 minutes.</td>
</tr>
</tbody>
</table>

#### Table 5 to Subpart AAAAA of Part 63—Continuous Compliance With Operating Limits

As required in §63.7121, you must demonstrate continuous compliance with each operating limit that applies to you, according to the following table:

<table>
<thead>
<tr>
<th>For . . .</th>
<th>For the following operating limit . . .</th>
<th>You must demonstrate continuous compliance by . . .</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Each lime kiln controlled by a wet scrubber.</td>
<td>Maintain the 3-hour block average exhaust gas stream pressure drop across the wet scrubber greater than or equal to the pressure drop operating limit established during the PM performance test; and maintain the 3-hour block average scrubbing liquid flow rate greater than or equal to the flow rate operating limit established during the performance test.</td>
<td>Collecting the wet scrubber operating data according to all applicable requirements in §63.7113 and reducing the data according to §63.7113(a); maintaining the 3-hour block average exhaust gas stream pressure drop across the wet scrubber greater than or equal to the pressure drop operating limit established during the PM performance test; and maintaining the 3-hour block average scrubbing liquid flow rate greater than or equal to the flow rate operating limit established during the performance test (the continuous scrubbing liquid flow rate measuring device must be accurate within ±1% and the continuous pressure drop measurement device must be accurate within ±1%).</td>
</tr>
<tr>
<td>Environmental Protection Agency</td>
<td>Pt. 63, Subpt. AAAAA, Table 5</td>
<td></td>
</tr>
<tr>
<td>---------------------------------</td>
<td>--------------------------------</td>
<td></td>
</tr>
<tr>
<td><strong>For . . .</strong></td>
<td><strong>For the following operating limit . . .</strong></td>
<td><strong>You must demonstrate continuous compliance by . . .</strong></td>
</tr>
<tr>
<td>2. Each lime kiln or lime cooler equipped with a FF and using a BLDs, and each lime kiln equipped with an ESP or FF using a PM detector.</td>
<td>a. Maintain and operate the FF or ESP such that the bag leak or PM detector alarm is not activated and alarm condition does not exist for more than 5 percent of the total operating time in each 6-month period.</td>
<td>(i) Operating the FF or ESP so that the alarm on the bag leak or PM detection system is not activated and an alarm condition does not exist for more than 5 percent of the total operating time in each 6-month reporting period; and continuously recording the output from the BLD or PM detection system; and (ii) Each time the alarm sounds and the owner or operator initiates corrective actions within 1 hour of the alarm, 1 hour of alarm time will be counted (if the owner or operator takes longer than 1 hour to initiate corrective actions); if inspection of the FF or ESP system demonstrates that no corrective actions are necessary, no alarm time will be counted.</td>
</tr>
<tr>
<td>3. Each stack emissions source from a PSH operation subject to an opacity limit, which is controlled by a wet scrubber.</td>
<td>Maintain the 3-hour block average exhaust gas stream pressure drop across the wet scrubber greater than or equal to the pressure drop operating limit established during the PM performance test; and maintaining the 3-hour block average scrubbing liquid flow rate greater than or equal to the flow rate operating limit established during the performance test.</td>
<td>Collecting the wet scrubber operating data according to all applicable requirements in §63.7113 and reducing the data according to §63.7113(a); maintaining the 3-hour block average exhaust gas stream pressure drop across the wet scrubber greater than or equal to the pressure drop operating limit established during the PM performance test; and maintaining the 3-hour block average scrubbing liquid flow rate greater than or equal to the flow rate operating limit established during the performance test (the continuous scrubbing liquid flow rate measuring device must be accurate within ±1% and the continuous pressure drop measurement device must be accurate within ±1%).</td>
</tr>
<tr>
<td>4. For each lime kiln or lime cooler equipped with a FF or an ESP that uses a COMS as the monitoring device.</td>
<td>a. Maintain and operate the FF or ESP such that the average opacity for any 6-minute block period does not exceed 15 percent.</td>
<td>i. Installing, maintaining, calibrating and operating a COMS as required by 40 CFR part 63, subpart A, General Provisions and according to PS–1 of appendix B to part 60 of this chapter, except as specified in §63.7113(g)(2); and ii. Collecting the COMS data at a frequency of at least once every 15 seconds, determining block averages for each 6-minute period and demonstrating for each 6-minute block period the average opacity does not exceed 15 percent.</td>
</tr>
</tbody>
</table>
### Table 6 to Subpart AAAAA of Part 63—Periodic Monitoring for Compliance WithOpacity and Visible Emissions Limits

As required in §63.7121 you must periodically demonstrate compliance with each opacity and VE limit that applies to you, according to the following table:

<table>
<thead>
<tr>
<th>For . . .</th>
<th>For the following emission limitation . . .</th>
<th>You must demonstrate ongoing compliance . . .</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Each PSH operation subject to an opacity limitation as required in Table 1 to this subpart, or any vents from buildings subject to an opacity limitation.</td>
<td>a. 7–10 percent opacity, depending on the PSH operation, as required in Table 1 to this subpart.</td>
<td>(i) Conducting a monthly 1-minute VE check of each emission unit in accordance with §63.7121(e); the check must be conducted while the affected source is in operation; (ii) If no VE are observed in 6 consecutive monthly checks for any emission unit, you may decrease the frequency of VE checking from monthly to semi-annually for that emission unit; if VE are observed during any semiannual check, you must resume VE checking of that emission unit on a monthly basis and maintain that schedule until no VE are observed in 6 consecutive monthly checks; (iii) If no VE are observed during the semiannual check for any emission unit, you may decrease the frequency of VE checking from semi-annually to annually for that emission unit; if VE are observed during any annual check, you must resume checking of that emission unit on a monthly basis and maintain that schedule until no VE are observed in 6 consecutive monthly checks; and (iv) If VE are observed during any VE check, you must conduct a 6-minute test of opacity in accordance with Method 9 of Appendix A to part 60 of this chapter; you must begin the Method 9 test within 1 hour of any observation of VE and the 6-minute opacity reading must not exceed the applicable opacity limit.</td>
</tr>
<tr>
<td>2. Any building subject to a VE limit, according to item 8 of Table 1 to this subpart.</td>
<td>a. No VE</td>
<td>(i) Conducting a monthly VE check of the building, in accordance with the specifications in §63.7112(k); the check must be conducted while all the enclosed PSH operations are operating; (ii) The check for each affected building must be at least 5 minutes, with each side of the building and roof being observed for at least 1 minute; (iii) If no VE are observed in 6 consecutive monthly checks of the building, you may decrease the frequency of checking from monthly to semi-annually for that affected source; if VE are observed during any semi-annual check, you must resume checking on a monthly basis and maintain that schedule until no VE are observed in 6 consecutive monthly checks; and</td>
</tr>
</tbody>
</table>
### Table 7 to Subpart AAAAA of Part 63—Requirements for Reports

As required in §63.7131, you must submit each report in this table that applies to you.

<table>
<thead>
<tr>
<th>You must submit a . . .</th>
<th>The report must contain . . .</th>
<th>You must submit the report . . .</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Compliance report</td>
<td>a. If there are no deviations from any emission limitations (emission limit, operating limit, opacity limit, and VE limit) that applies to you, a statement that there were no deviations from the emission limitations during the reporting period;</td>
<td>Semiannually according to the requirements in §63.7131(b).</td>
</tr>
<tr>
<td></td>
<td>b. If there were no periods during which the CMS, including any operating parameter monitoring system, 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;</td>
<td>Semiannually according to the requirements in §63.7131(b).</td>
</tr>
<tr>
<td></td>
<td>c. If you have a deviation from any emission limitation (emission limit, operating limit, opacity limit, and VE limit) during the reporting period, the report must contain the information in §63.7131(d);</td>
<td>Semiannually according to the requirements in §63.7131(b).</td>
</tr>
<tr>
<td></td>
<td>d. If there were periods during which the CMS, including any operating parameter monitoring system, was out-of-control, as specified in §63.8(c)(7), the report must contain the information in §63.7131(e); and</td>
<td>Semiannually according to the requirements in §63.7131(b).</td>
</tr>
<tr>
<td></td>
<td>e. If you had a startup, shutdown or malfunction during the reporting period and you took actions consistent with your SSMP, the compliance report must include the information in §63.10(d)(5)(i);</td>
<td>Semiannually according to the requirements in §63.7131(b).</td>
</tr>
<tr>
<td>2. An immediate startup, shutdown, and malfunction report if you had a startup, shutdown, or malfunction during the reporting period that is not consistent with your SSMP.</td>
<td></td>
<td>By fax or telephone within 2 working days after starting actions inconsistent with the SSMP.</td>
</tr>
<tr>
<td>3. An immediate startup, shutdown, and malfunction report if you had a startup, shutdown, or malfunction during the reporting period that is not consistent with your SSMP.</td>
<td>The information in §63.10(d)(5)(i);</td>
<td>By letter within 7 working days after the end of the event unless you have made alternative arrangements with the permitting authority. See §63.10(d)(5)(ii).</td>
</tr>
</tbody>
</table>
As required in §63.7140, you must comply with the applicable General Provisions requirements according to the following table:

<table>
<thead>
<tr>
<th>Citation</th>
<th>Summary of requirement</th>
<th>Am I subject to this requirement?</th>
<th>Explanations</th>
</tr>
</thead>
<tbody>
<tr>
<td>§ 63.1(a)(1)–(4)</td>
<td>Applicability</td>
<td>Yes.</td>
<td></td>
</tr>
<tr>
<td>§ 63.1(a)(5)</td>
<td></td>
<td>No.</td>
<td></td>
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<tr>
<td>§ 63.1(a)(6)</td>
<td>Applicability</td>
<td>Yes.</td>
<td></td>
</tr>
<tr>
<td>§ 63.1(a)(7)–(a)(9)</td>
<td>Applicability</td>
<td>No.</td>
<td></td>
</tr>
<tr>
<td>§ 63.1(a)(10)–(a)(14)</td>
<td>Initial Applicability Determination</td>
<td>Yes.</td>
<td>§§63.7081 and 63.7142 specify additional applicability determination requirements.</td>
</tr>
<tr>
<td>§ 63.1(b)(2)</td>
<td>Initial Applicability Determination</td>
<td>No.</td>
<td></td>
</tr>
<tr>
<td>§ 63.1(b)(3)</td>
<td></td>
<td>No.</td>
<td></td>
</tr>
<tr>
<td>§ 63.1(c)(1)</td>
<td>Applicability After Standard Established</td>
<td>Yes.</td>
<td></td>
</tr>
<tr>
<td>§ 63.1(c)(2)</td>
<td>Permit Requirements</td>
<td>No.</td>
<td>Area sources not subject to subpart AAAAA, except all sources must make initial applicability determination.</td>
</tr>
<tr>
<td>§ 63.1(c)(3)</td>
<td></td>
<td>No.</td>
<td></td>
</tr>
<tr>
<td>§ 63.1(c)(4)–(5)</td>
<td>Extensions, Notifications</td>
<td>No.</td>
<td></td>
</tr>
<tr>
<td>§ 63.1(d)</td>
<td>Applicability of Permit Program</td>
<td>Yes.</td>
<td></td>
</tr>
<tr>
<td>§ 63.2</td>
<td>Definitions</td>
<td>Additional definitions in §63.7143.</td>
<td></td>
</tr>
<tr>
<td>§ 63.3(a)–(c)</td>
<td>Units and Abbreviations</td>
<td>Yes.</td>
<td></td>
</tr>
<tr>
<td>§ 63.4(a)(1)–(a)(2)</td>
<td>Prohibited Activities</td>
<td>Yes.</td>
<td></td>
</tr>
<tr>
<td>§ 63.4(b)–(c)</td>
<td>Circumvention, Severability</td>
<td>No.</td>
<td></td>
</tr>
<tr>
<td>§ 63.5(a)(1)–(2)</td>
<td>Construction/Reconstruction</td>
<td>Yes.</td>
<td></td>
</tr>
<tr>
<td>§ 63.5(b)</td>
<td>Compliance Dates</td>
<td>No.</td>
<td></td>
</tr>
<tr>
<td>§ 63.5(b)(3)–(4)</td>
<td>Construction Approval, Applicability</td>
<td>Yes.</td>
<td></td>
</tr>
<tr>
<td>§ 63.5(b)(5)</td>
<td></td>
<td>No.</td>
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<tr>
<td>§ 63.5(b)(6)</td>
<td>Applicability</td>
<td>Yes.</td>
<td></td>
</tr>
<tr>
<td>§ 63.5(d)(1)–(4)</td>
<td>Approval of Construction/Reconstruction</td>
<td>Yes.</td>
<td></td>
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<tr>
<td>§ 63.5(e)</td>
<td>Approval of Construction/Reconstruction</td>
<td>Yes.</td>
<td></td>
</tr>
<tr>
<td>§ 63.5(f)(1)–(2)</td>
<td>Approval of Construction/Reconstruction</td>
<td>Yes.</td>
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<tr>
<td>§ 63.6(a)</td>
<td>Compliance for Standards and Maintenance</td>
<td>Yes.</td>
<td>See §63.7100 for OM&amp;M requirements.</td>
</tr>
<tr>
<td>§ 63.6(b)(1)–(5)</td>
<td>Compliance Dates</td>
<td>Yes.</td>
<td></td>
</tr>
<tr>
<td>§ 63.6(b)(6)</td>
<td></td>
<td>No.</td>
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<tr>
<td>§ 63.6(b)(7)</td>
<td>Compliance Dates</td>
<td>Yes.</td>
<td></td>
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<tr>
<td>§ 63.6(c)(1)–(2)</td>
<td>Compliance Dates</td>
<td>Yes.</td>
<td></td>
</tr>
<tr>
<td>§ 63.6(c)(3)–(c)(4)</td>
<td></td>
<td>No.</td>
<td></td>
</tr>
<tr>
<td>§ 63.6(c)(5)</td>
<td>Compliance Dates</td>
<td>Yes.</td>
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</tr>
<tr>
<td>§ 63.6(d)</td>
<td></td>
<td>No.</td>
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<tr>
<td>§ 63.6(e)(1)</td>
<td>Operation &amp; Maintenance</td>
<td>Yes.</td>
<td></td>
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<tr>
<td>§ 63.6(e)(2)</td>
<td></td>
<td>No.</td>
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<tr>
<td>§ 63.6(e)(3)</td>
<td>Startup, Shutdown Malfunction Plan</td>
<td>Yes.</td>
<td></td>
</tr>
<tr>
<td>§ 63.6(f)(1)–(3)</td>
<td>Compliance with Emission Standards</td>
<td>Yes.</td>
<td></td>
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<tr>
<td>§ 63.6(g)(1)–(g)(3)</td>
<td>Alternative Standard</td>
<td>Yes.</td>
<td></td>
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<tr>
<td>§ 63.6(h)(1)–(2)</td>
<td>Opacity/VE Standards</td>
<td>Yes.</td>
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<tr>
<td>§ 63.6(h)(3)</td>
<td></td>
<td>No.</td>
<td></td>
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<tr>
<td>§ 63.6(h)(4)–(h)(5)</td>
<td>Opacity/VE Standards</td>
<td>Yes.</td>
<td>This requirement only applies to opacity and VE performance checks required in Table 4 to subpart AAAAA.</td>
</tr>
<tr>
<td>Citation</td>
<td>Summary of requirement</td>
<td>Am I subject to this requirement?</td>
<td>Explanations</td>
</tr>
<tr>
<td>----------------------------------------------</td>
<td>------------------------</td>
<td>----------------------------------</td>
<td>-----------------------------------------------------------------------------</td>
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<tr>
<td>§63.6(h)(5)(ii)-(iii)</td>
<td>Opacity/VE Standards</td>
<td>No</td>
<td>Test durations are specified in subpart AAAAA; subpart AAAAA takes precedence.</td>
</tr>
<tr>
<td>§63.6(h)(5)(iv)</td>
<td>Opacity/VE Standards</td>
<td>No</td>
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<tr>
<td>§63.6(h)(5)(v)</td>
<td>Opacity/VE Standards</td>
<td>Yes</td>
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<tr>
<td>§63.6(h)(6)</td>
<td>Opacity/VE Standards</td>
<td>Yes</td>
<td></td>
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<tr>
<td>§63.6(h)(7)</td>
<td>COM Use</td>
<td>Yes</td>
<td></td>
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<tr>
<td>§63.6(h)(8)</td>
<td>Compliance with Opacity</td>
<td>Yes</td>
<td></td>
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<tr>
<td>§63.6(h)(9)</td>
<td>Adjustment of Opacity Limit</td>
<td>Yes</td>
<td></td>
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<tr>
<td>§63.6(i)(1)-(i)(14)</td>
<td>Extension of Compliance</td>
<td>Yes</td>
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<tr>
<td>§63.6(i)(15)</td>
<td>No</td>
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<tr>
<td>§63.6(i)(16)</td>
<td>Extension of Compliance</td>
<td>Yes</td>
<td></td>
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<tr>
<td>§63.6(j)</td>
<td>Exemption from Compliance</td>
<td>Yes</td>
<td>§63.7110 specifies deadlines; §63.7112 has additional specific requirements.</td>
</tr>
<tr>
<td>§63.7(a)(1)-(a)(3)</td>
<td>Performance Testing Requirements</td>
<td>Yes</td>
<td></td>
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<tr>
<td>§63.7(b)</td>
<td>Notification</td>
<td>Yes</td>
<td></td>
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<tr>
<td>§63.7(c)</td>
<td>Quality Assurance/Test Plan</td>
<td>Yes</td>
<td></td>
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<tr>
<td>§63.7(d)</td>
<td>Testing Facilities</td>
<td>Yes</td>
<td></td>
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<tr>
<td>§63.7(e)(1)-(4)</td>
<td>Conduct of Tests</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>§63.7(f)</td>
<td>Alternative Test Method</td>
<td>Yes</td>
<td></td>
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<tr>
<td>§63.7(g)</td>
<td>Data Analysis</td>
<td>Yes</td>
<td></td>
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<tr>
<td>§63.7(h)</td>
<td>Waiver of Tests</td>
<td>No</td>
<td>See §63.7113.</td>
</tr>
<tr>
<td>§63.8(a)(1)</td>
<td>Monitoring Requirements</td>
<td>Yes</td>
<td></td>
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<tr>
<td>§63.8(a)(2)</td>
<td>Monitoring</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>§63.8(a)(3)</td>
<td>No</td>
<td></td>
<td></td>
</tr>
<tr>
<td>§63.8(a)(4)</td>
<td>Monitoring</td>
<td>No</td>
<td>Flares not applicable.</td>
</tr>
<tr>
<td>§63.8(b)(1)-(3)</td>
<td>Conduct of Monitoring</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>§63.8(c)(1)-(3)</td>
<td>CMS Operation/Maintenance</td>
<td>Yes</td>
<td>See §63.7121.</td>
</tr>
<tr>
<td>§63.8(c)(4)</td>
<td>CMS Requirements</td>
<td>No</td>
<td>No CEMS are required under subpart AAAAA; see §63.7113 for CPMS requirements.</td>
</tr>
<tr>
<td>§63.8(c)(4)(i)-(ii)</td>
<td>Cycle Time for COM and CEMS</td>
<td>Yes</td>
<td></td>
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<tr>
<td>§63.8(c)(5)</td>
<td>Minimum COM procedures</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>§63.8(c)(6)</td>
<td>CMS Requirements</td>
<td>No</td>
<td>COM not required.</td>
</tr>
<tr>
<td>§63.8(c)(7)-(8)</td>
<td>CMS Requirements</td>
<td>Yes</td>
<td>See §63.7113.</td>
</tr>
<tr>
<td>§63.8(d)</td>
<td>Quality Control</td>
<td>No</td>
<td>See §63.7113.</td>
</tr>
<tr>
<td>§63.8(e)</td>
<td>Performance Evaluation for CMS</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>§63.8(f)(1)-(f)(5)</td>
<td>Alternative Monitoring Method</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>§63.8(g)(1)-(g)(5)</td>
<td>Alternative to Relative Accuracy test</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>§63.8(h)(1)-(h)(5)</td>
<td>Data Reduction; Data That Cannot Be Used</td>
<td>No</td>
<td>See data reduction requirements in §§63.7120 and 63.7121.</td>
</tr>
<tr>
<td>§63.9(a)</td>
<td>Notification Requirements</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>§63.9(b)</td>
<td>Initial Notifications</td>
<td>Yes</td>
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</tr>
<tr>
<td>§63.9(b)</td>
<td>Request for Compliance Extension</td>
<td>Yes</td>
<td></td>
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<tr>
<td>§63.9(d)</td>
<td>New Source Notification for Special Compliance Requirements</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>§63.9(e)</td>
<td>Notification of Performance Test</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>§63.9(f)</td>
<td>Notification of VE/Opacity Test</td>
<td>Yes</td>
<td>This requirement only applies to opacity and VE performance tests required in Table 4 to subpart AAAAA. Notification not required for VE/opacity test under Table 6 to subpart AAAAA. Not required for operating parameter monitoring.</td>
</tr>
<tr>
<td>§63.9(g)</td>
<td>Additional CMS Notifications</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>§63.9(h)(1)-(h)(3)</td>
<td>Notification of Compliance Status</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>§63.9(h)(4)</td>
<td>No</td>
<td></td>
<td></td>
</tr>
<tr>
<td>§63.9(h)(5)-(h)(6)</td>
<td>Notification of Compliance Status</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>§63.9(i)</td>
<td>Adjustment of Deadlines</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>§63.9(j)</td>
<td>Change in Previous Information</td>
<td>Yes</td>
<td></td>
</tr>
</tbody>
</table>
§ 63.7180  What is the purpose of this subpart?

This subpart establishes national emission standards for hazardous air pollutants (NESHAP) for semiconductor manufacturing facilities. This subpart also establishes requirements to demonstrate initial and continuous compliance with the emission standards.

§ 63.7181  Am I subject to this subpart?

(a) You are subject to this subpart if you own or operate a semiconductor manufacturing process unit that is a major source of hazardous air pollutants (HAP) emissions or that is located at, or is part of, a major source of HAP emissions.

(b) A major source of HAP emissions is any stationary source or group of stationary sources located within a contiguous area and under common control that emits or has the potential to emit, considering controls, in the aggregate, any single HAP at a rate of 10 tons per year (tpy) or more or any combination of HAP at a rate of 25 tpy or more.

§ 63.7182  What parts of my facility does this subpart cover?

(a) This subpart applies to each new, reconstructed, or existing affected source that you own or operate that manufactures semiconductors.

(b) An affected source subject to this subpart is the collection of all semiconductor manufacturing process units used to manufacture p-type and n-type semiconductors and active solid-state devices from a wafer substrate, including research and development activities integrated into a semiconductor manufacturing process unit.
manufacturing process unit. A semiconductor manufacturing process unit includes the equipment assembled and connected by ductwork or hard-piping including furnaces and associated unit operations; associated wet and dry work benches; associated recovery devices; feed, intermediate, and product storage tanks; product transfer racks and connected ducts and piping; pumps, compressors, agitators, pressure-relief devices, sampling connecting systems, open-ended valves or lines, valves, connectors, and instrumentation systems; and control devices.

(c) Your affected source is a new affected source if you commence construction of the affected source after May 8, 2002, and you meet the applicability criteria in §63.7181 at the time you commence construction.

(d) Your affected source is a reconstructed affected source if you meet the criteria for “reconstruction,” as defined in §63.2.

(e) Your source is an existing affected source if it is not a new or reconstructed affected source.

§ 63.7183 When do I have to comply with this subpart?

(a) If you have a new or reconstructed affected source, you must comply with this subpart according to paragraphs (a)(1) and (2) of this section.

(1) If you start up your affected source before May 22, 2003, then you must comply with the emission standards for new and reconstructed sources in this subpart no later than May 22, 2003.

(2) If you start up your affected source after May 22, 2003, then you must comply with the emission standards for new and reconstructed sources in this subpart upon startup of your affected source.

(b) If you have an existing affected source, you must comply with the emission standards for existing sources no later than 3 years from May 22, 2003.

(c) If you have an area source that increases its emissions or its potential to emit such that it becomes a major source of HAP and an affected source subject to this subpart, paragraphs (c)(1) and (2) of this section apply:

(1) Any portion of your existing facility that is a new affected source as specified at §63.7182(c), or a reconstructed affected source as specified at §63.7182(d), must be in compliance with this subpart upon startup.

(2) Any portion of your facility that is an existing affected source, as specified at §63.7182(e), must be in compliance with this subpart by not later than 3 years after it becomes a major source.

(d) You must meet the notification requirements in §63.7189 and in subpart A of this part. You must submit some of the notifications (e.g., Initial Notification) before the date you are required to comply with the emission limitations in this subpart.

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

(a) If you have a new, reconstructed, or existing affected source, as defined in §63.7182(b), you must comply with all applicable emission limitations in this section on and after the compliance dates specified in §63.7183.

(b) Process vents—organic HAP emissions. For each organic HAP process vent, other than process vents from storage tanks, you must limit organic HAP emissions to the level specified in paragraph (b)(1) or (2) of this section. These limitations can be met by venting emissions from your process vent through a closed vent system to any combination of control devices meeting the requirements of §63.982(a)(2).

(1) Reduce the emissions of organic HAP from the process vent stream by 98 percent by weight.

(2) Reduce or maintain the concentration of emitted organic HAP from the process vent to less than or equal to 20 parts per million by volume (ppmv).

(c) Process vents—inorganic HAP emissions. For each inorganic HAP process vent, other than process vents from storage tanks, you must limit inorganic HAP emissions to the level specified in paragraph (c)(1) or (2) of this section. These limitations can be met by venting emissions from your process vent through a closed vent system to a halogen scrubber meeting the requirements of §§63.983 (closed vent system requirements) and §63.994 (halogen
§ 63.7185  What are my general requirements for complying with this subpart?  

(a) You must be in compliance with the requirements of §63.7184 at all times, except during periods of startup, shutdown, or malfunction.

(b) You must always operate and maintain your affected source, including air pollution control and monitoring equipment, according to the provisions in §63.8(e)(1)(i).

(c) You must develop a written startup, shutdown, and malfunction plan (SSMP). Your SSMP must be prepared in accordance with the provisions in §63.8(e)(3).

(d) You must perform all the items listed in paragraphs (d)(1) through (3) of this section:

(1) Submit the necessary notifications in accordance with §63.7189.

(2) Submit the necessary reports in accordance with §63.7190.

(3) Maintain all necessary records you have used to demonstrate compliance with this subpart in accordance with §63.7191.

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

For each process vent or storage tank vent emission limitation in §63.7184 for which initial compliance is demonstrated by meeting a percent by weight HAP emissions reduction, or a HAP concentration limitation, you must conduct performance tests or an initial compliance demonstration within 180 days after the compliance date that is specified for your source in §63.7183 and according to the provisions in §63.7(a)(2).

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

(a) You must conduct each performance test in Table 1 to this subpart of control devices meeting the requirements of §63.982(a)(2).

Environmental Protection Agency

§ 63.7187

that applies to you as specified for process vents in § 63.982(a)(2) and storage tanks in § 63.982(a)(1). Performance tests must be conducted under maximum operating conditions or HAP emissions potential. Section 63.982(a)(1) and (2) only includes methods to measure the total organic regulated material or total organic carbon (TOC) concentration. The EPA Methods 26 and 26A are included in Table 1 to this subpart in addition to the test methods contained within § 63.982(a)(1) and (2). The EPA Method 26 or 26A must be used for testing regulated material containing inorganic HAP. Method 320 of 40 CFR part 63, appendix A, must be used to measure total vapor phase organic and inorganic HAP concentrations.

(b) If, without the use of a control device, your process vent stream has an organic HAP concentration of 20 ppmv or less or an inorganic HAP concentration of 0.42 ppmv or less, or your storage tank vent stream has an inorganic HAP concentration of 0.42 ppmv or less, you may demonstrate that the vent stream is compliant by engineering assessments and calculations or by conducting the applicable performance test requirements specified in Table 1 to this subpart. Your engineering assessments and calculations, as with performance tests (as specified in § 63.982(a)(1) and (2)), must represent your maximum operating conditions or HAP emissions potential and must be approved by the Administrator. You must demonstrate continuous compliance by certifying that your operations will not exceed the maximum operating conditions or HAP emissions potential represented by your design evaluation.

(c) If you are using a control device to comply with the emission limitations in § 63.7184 and the inlet concentration of HAP to the control device is 20 ppmv or less, then you may demonstrate that the control device meets the percent by weight HAP emission reduction limitation in § 63.7184(c)(1) or (d)(1) by conducting a design evaluation as specified in paragraph (i) of this section. Your design evaluation must represent your maximum operating conditions or HAP emissions potential and must be approved by the Administrator. You must demonstrate continuous compliance by certifying that your operations will not exceed the maximum operating conditions or HAP emissions potential represented by your design evaluation.

(d) [Reserved]

(e) For each monitoring system required in this section, you must develop and submit for approval a site-specific monitoring plan that addresses the criteria specified in paragraphs (e)(1) through (3) of this section.

1. Installation of the continuous monitoring system (CMS) sampling probe or other interface at a measurement location relative to each affected process unit such that the measurement is representative of control of the exhaust emissions (e.g., on or down-stream of the last control device);
2. Performance and equipment specifications for the sample interface, the pollutant concentration or parametric signal analyzer, and the data collection and reduction system; and
3. Performance evaluation procedures and acceptance criteria (e.g., calibrations).

(f) In your site-specific monitoring plan, you must also address the procedural processes in paragraphs (f)(1) through (3) of this section.

1. Ongoing operation and maintenance procedures in accordance with the general requirements of § 63.8(c)(1), (3), (4)(ii), (7), and (8);
2. Ongoing data quality assurance procedures in accordance with the general requirements of § 63.8(d); and
3. Ongoing recordkeeping and reporting procedures in accordance with the general requirements of § 63.10(c), (e)(1), and (e)(2)(i).

(g) You must conduct a performance evaluation of each CMS in accordance with your site-specific monitoring plan.

(h) You must operate and maintain the CMS in continuous operation according to the site-specific monitoring plan.

(i) Design evaluation. To demonstrate that a control device meets the required percent by weight inorganic HAP emission reduction limitation in § 63.7184(c)(1) or (d)(1), a design evaluation must address the composition of
§ 63.7188  What are my monitoring installation, operation, and maintenance requirements?

If you comply with the emission limitations of §63.7184 by venting the emissions of your semiconductor process vent through a closed vent system to a control device, you must comply with the requirements of paragraphs (a) and (b) of this section.

(a) You must meet the applicable general monitoring, installation, operation, and maintenance requirements specified in §63.996.

(b) You must meet the monitoring, installation, operation, and maintenance requirements specified for closed vent systems and applicable control devices in §§63.983 through 63.995. If you used the design evaluation procedure in §63.7187(i) to demonstrate compliance, you must use the information from the design evaluation to establish the operating parameter level for monitoring of the control device.
APPLICATIONS, NOTIFICATIONS, REPORTS, AND RECORDS

§ 63.7189 What applications and notifications must I submit and when?

(a) You must submit all of the applications and notifications in §§ 63.7(b) and (c); 63.8(e), (f)(4) and (f)(6); and 63.9(b) through (e), (g) and (h) that apply to you by the dates specified.

(b) As specified in § 63.9(b)(2), if you start up your affected source before May 22, 2003, you must submit an Initial Notification not later than 120 calendar days after May 22, 2003.

(c) As specified in § 63.9(b)(3), if you start up your new or reconstructed affected source on or after May 22, 2003, you must submit an Initial Notification not later than 120 calendar days after you become subject to this subpart.

(d) If you are required to conduct a performance test, you must submit a notification of intent to conduct a performance test at least 60 calendar days before the performance test is scheduled to begin as required in § 63.7(h)(1).

(e) If you are required to conduct a performance test or other initial compliance demonstration, you must submit a Notification of Compliance Status according to § 63.9(h)(2)(ii) and according to paragraphs (e)(1) and (2) of this section.

(1) For each initial compliance demonstration that does not include a performance test, you must submit the Notification of Compliance Status before the close of business on the 30th calendar day following the completion of the initial compliance demonstration. If you used the design evaluation procedure in § 63.7187(i) to demonstrate compliance, you must include the results of the design evaluation in the Notification of Compliance Status.

(2) For each initial compliance demonstration required that includes a performance test conducted according to the requirements in Table 1 to this subpart, you must submit a notification of the date of the performance evaluation at least 60 days prior to the date the performance evaluation is scheduled to begin as required in § 63.8(e)(2).

§ 63.7190 What reports must I submit and when?

(a) You must submit each of the following reports that apply to you.

(1) Periodic compliance reports. You must submit a periodic compliance report that contains the information required under paragraphs (c) through (e) of this section, and any requirements specified to be reported for process vents in § 63.982(a)(2) and storage tanks in § 63.982(a)(1).

(2) Immediate startup, shutdown, and malfunction report. You must submit an Immediate Startup, Shutdown, and Malfunction Report if you had a startup, shutdown, or malfunction during the reporting period that is not consistent with your SSMP. Your report must contain actions taken during the event. You must submit this report by fax or telephone within 2 working days after starting actions inconsistent with your SSMP. You are required to follow up this report with a report specifying the information in § 63.10(d)(5)(ii) by letter within 7 working days after the end of the event unless you have made alternative arrangements with your permitting authority.

(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 according to paragraphs (b)(1) through (5) of this section.

(1) The first periodic compliance report must cover the period beginning on the compliance date that is specified for your affected source in § 63.7183 and ending on June 30 or December 31, whichever date is the first date following the end of the first 12 calendar months after the compliance date that is specified for your source in § 63.7183.

(2) The first periodic compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date follows the end of the first 12 calendar months after the compliance date that is specified for your source in § 63.7183.

(3) Each subsequent periodic 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.
§ 63.7191 40 CFR Ch. I (7–1–16 Edition)

(4) Each subsequent periodic 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 affected source that is subject to permitting regulations pursuant to 40 CFR part 70 or 40 CFR part 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 periodic compliance reports according to the dates the permitting authority has established instead of according to the dates in paragraphs (b)(1) through (4) of this section.

(c) The periodic compliance report must contain the information specified in paragraphs (c)(1) through (5) of this section.

(1) Company name and address.

(2) Statement by a responsible official with that official’s name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report.

(3) Date of report and beginning and ending dates of the reporting period.

(4) If there are no deviations from any emission limitations that apply to you, a statement that there were no deviations from the emission limitations during the reporting period and that no CMS was inoperative, inactive, malfunctioning, out-of-control, repaired, or adjusted.

(5) If you had a startup, shutdown, or malfunction during the reporting period and you took actions consistent with your SSMP, your periodic compliance report must include the information in § 63.10(d)(5) for each startup, shutdown, and malfunction.

(d) For each deviation from an emission limitation that occurs at an affected source where you are not using a CMS to comply with the emission limitations, the periodic compliance report must contain the information in paragraphs (d)(1) through (2) of this section.

(1) Information on the number, duration, and cause of deviations (including unknown cause), if applicable.

(2) For each deviation from an emission limitation occurring at an affected source where you are using a CMS to demonstrate compliance with the emission limitation, you must include the information in paragraphs (e)(1) through (8) of this section.

(1) The date and time that each malfunction started and stopped, and the reason it was inoperative.

(2) The date and time that each CMS was inoperative, except for calibration checks.

(3) The date and time 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 startup, shutdown, or malfunction or during another period, and the cause of the deviation.

(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 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 source operating time during the reporting period.

(7) An identification of each HAP that was monitored at the affected source.

(8) The date of the latest CMS certification or audit.

§ 63.7191 What records must I keep?

(a) You must keep the records listed in paragraphs (a)(1) through (3) of this section.

(1) A copy of each notification and report that you submitted to comply with this subpart, including all documentation supporting any Notification of Compliance Status and periodic report of compliance that you submitted, according to the requirements in § 63.10(b)(2)(xiv).

(2) The records in § 63.6(e)(3)(iii) through (v) related to startup, shutdown, and malfunctions.
Environmental Protection Agency

§ 63.7195

(3) Records of performance tests and performance evaluations as required in §63.10(b)(2)(viii).

(b) For each CMS, you must keep the records listed in paragraphs (b)(1) through (5) of this section.

1. Records described in §63.10(b)(2)(vi) through (x). (2) All required measurements needed to demonstrate compliance with a relevant standard (e.g., 30-minute averages of CMS data, raw performance testing measurements, raw performance evaluation measurements).

(3) All required CMS measurements (including monitoring data recorded during unavoidable CMS breakdowns and out-of-control periods).

(4) Records of the date and time that each deviation started and stopped, and whether the deviation occurred during a period of startup, shutdown, or malfunction or during another period.

(5) Records for process vents according to the requirements specified in §63.982(a)(2) and storage tank vents according to the requirements specified in §63.982(a)(1).

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

(a) Your records must be in a form suitable and readily available for expedient 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 on site for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to §63.10(b)(1). You can keep the records offsite for the remaining 3 years.

OTHER REQUIREMENTS AND INFORMATION

§ 63.7193 What parts of the General Provisions apply to me?

Table 2 to this subpart shows which parts of the General Provisions in §§63.1 through 63.13 apply to you.

§ 63.7194 Who implements and enforces this subpart?

(a) This subpart can be implemented and enforced by us, the U.S. Environ-

mental Protection Agency (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 has the authority to implement and enforce this subpart. You should contact your U.S. 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 U.S. EPA 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 as listed in paragraphs (c)(1) through (4) of this section.

(1) Approval of alternatives to the non-opacity emission limitations in §63.7184 under §63.6(f).

(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.

§ 63.7195 What definitions apply to this subpart?

Terms used in this subpart are defined in the Clean Air Act, in §§63.2 and 63.90, the General Provisions of this part (40 CFR part 63, subpart A), and in this section as follows: Combined HAP process vent means a process vent that emits both inorganic and organic HAP to the atmosphere.

Control device means a combustion device, recovery device, recapture device, or any combination of these devices used for the primary purpose of reducing emissions to comply with this subpart. Devices that are inherent to a process or are integral to the operation of a process are not considered control devices for the purposes of this subpart, even though these devices may have the secondary effect of reducing emissions.
Inorganic HAP process vent means a process vent that emits only inorganic HAP to the atmosphere.

Organic HAP process vent means a process vent that emits only organic HAP to the atmosphere.

Process vent means the point at which HAP emissions are released to the atmosphere from a semiconductor manufacturing process unit or storage tank by means of a stack, chimney, vent, or other functionally equivalent opening. The HAP emission points originating from wastewater treatment equipment, other than storage tanks, are not considered to be a process vent, unless the wastewater treatment equipment emission points are connected to a common vent or exhaust plenum with other process vents.

Semiconductor manufacturing means the collection of semiconductor manufacturing process units used to manufacture p-type and n-type semiconductors or active solid state devices from a wafer substrate, including processing from crystal growth through wafer fabrication, and testing and assembly. Examples of semiconductor or related solid state devices include semiconductor diodes, semiconductor stacks, rectifiers, integrated circuits, and transistors.

Semiconductor manufacturing process unit means the collection of equipment used to carry out a discrete operation in the semiconductor manufacturing process. These operations include, but are not limited to, crystal growing; solvent stations used to prepare and clean materials for subsequent processing or for parts cleaning; wet chemical stations used for cleaning (other than solvent cleaning); photoresist application, developing, and stripping; etching; gaseous operation stations used for stripping, cleaning, doping, etching, and layering; separation; encapsulation; and testing. Research and development operations associated with semiconductor manufacturing and conducted at a semiconductor manufacturing facility are considered to be semiconductor manufacturing process units.

Storage tank means a stationary unit that is constructed primarily from nonearthen materials (such as wood, concrete, steel, fiberglass, or plastic) which provides structural support and is designed to hold an accumulation of liquids or other materials used in or generated by a semiconductor manufacturing process unit. The following are not storage tanks for the purposes of this subpart:

1. Tanks permanently attached to motor vehicles such as trucks, railcars, barges, or ships;
2. Flow-through tanks where wastewater undergoes treatment (such as pH adjustment) before discharge, and are not used to accumulate wastewater;
3. Bottoms receiver tanks; and
4. Surge control tanks.


### Table 1 to Subpart BBBB of Part 63—Requirements for Performance Tests

As stated in §63.7187, you must comply with the requirements for performance tests in the following table:

<table>
<thead>
<tr>
<th>For . .</th>
<th>You must . .</th>
<th>Using . .</th>
<th>According to the following requirements . .</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Process or storage tank vent streams.</td>
<td>a. Select sampling port's location and the number of traverse ports.</td>
<td>Method 1 or 1A of 40 CFR part 60, appendix A.</td>
<td>Sampling sites must be located at the inlet (if emission reduction or destruction efficiency testing is required) and outlet of the control device and prior to any releases to the atmosphere.</td>
</tr>
<tr>
<td></td>
<td>b. Determine velocity and volumetric flow rate.</td>
<td>Method 2, 2A, 2C, 2D, 2F, or 2G of 40 CFR part 60, appendix A.</td>
<td>For HAP reduction efficiency testing only; not necessary for determining compliance with a ppmv concentration limit.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>You may use ASME PTC 19.10–1981–Part 10 (available for purchase from Three Park Avenue, New York, NY 10016–5990) as an alternative to EPA Method 3B.</td>
</tr>
</tbody>
</table>
Environmental Protection Agency  
Pt. 63, Subpt. BBBBB, Table 1

<table>
<thead>
<tr>
<th>For . . .</th>
<th>You must . . .</th>
<th>Using . . .</th>
<th>According to the following requirements . . .</th>
</tr>
</thead>
</table>
   a. Measure organic and inorganic HAP concentration (two method option). | Method 4 of 40 CFR part 60, appendix A.  
   i. Method 18, 25, or 25A of 40 CFR part 60, appendix A, AND  
   ii. Method 26 or 26A of 40 CFR part 60, appendix A. | For flow rate determination and correction to dry basis, if necessary.  
   (1) To determine compliance with the percent by weight emission reduction limit, conduct simultaneous sampling at inlet and outlet of control device and analyze for same organic and inorganic HAP at both inlet and outlet; and  
   (2) If you use Method 25A to determine the TOC concentration for compliance with the 20 ppmv emission limitation, the instrument must be calibrated on methane or the predominant HAP. If you calibrate on the predominant HAP, you must comply with each of the following:  
   —The organic HAP used as the calibration gas must be the single organic HAP representing the largest percent of emissions by volume.  
   —The results are acceptable if the response from the high level calibration gas is at least 20 times the standard deviation of the response from the zero calibration gas when the instrument is zeroed on its most sensitive scale.  
   —The span value of the analyzer must be less than 100 ppmv.  
   To determine compliance with 98 percent reduction limit, conduct simultaneous sampling at inlet and outlet of control device and analyze for same organic and inorganic HAP at both inlet and outlet. |
| 3. Storage tank vent stream . . . | c. Measure organic and inorganic HAP simultaneously (one method option). | Method 320 of 40 CFR part 63, appendix A. | To determine compliance with the percent by weight emission reduction limit, conduct simultaneous sampling at inlet and outlet of control device and analyze for same organic and inorganic HAP at both inlet and outlet. |
|                                     | Measure inorganic HAP concentration. | Method 26 or 26A of 40 CFR part 60, appendix A, or Method 320 of 40 CFR part 63, appendix A. | To determine compliance with percent by weight emission reduction limit, conduct simultaneous sampling at inlet and outlet of control device and analyze for same inorganic HAP at both inlet and outlet. |
TABLE 2 TO SUBPART BBBBB OF PART 63—APPLICABILITY OF GENERAL PROVISIONS TO SUBPART BBBBB

As stated in §63.7193, you must comply with the applicable General Provisions requirements according to the following table:

<table>
<thead>
<tr>
<th>Citation</th>
<th>Subject</th>
<th>Applicable to Subpart BBBBB?</th>
</tr>
</thead>
<tbody>
<tr>
<td>§ 63.1</td>
<td>Applicability</td>
<td>Yes.</td>
</tr>
<tr>
<td>§ 63.2</td>
<td>Definitions</td>
<td>Yes.</td>
</tr>
<tr>
<td>§ 63.3</td>
<td>Units and Abbreviations</td>
<td>Yes.</td>
</tr>
<tr>
<td>§ 63.4</td>
<td>Prohibited Activities and Circumvention</td>
<td>Yes.</td>
</tr>
<tr>
<td>§ 63.5</td>
<td>Construction and Reconstruction</td>
<td>Yes.</td>
</tr>
<tr>
<td>§ 63.6</td>
<td>Compliance with Standards and Maintenance</td>
<td>Yes.</td>
</tr>
<tr>
<td>§ 63.7</td>
<td>Performance Testing Requirements</td>
<td>Yes, with the exception of §63.7(e)(1). Performance testing requirements that apply are specified in this subpart, and in §63.982(a)(1) and (2).</td>
</tr>
<tr>
<td>§ 63.8</td>
<td>Monitoring Requirements</td>
<td>Monitoring requirements are specified in this subpart and in §63.982(a)(1) and (2). The closed vent system inspection requirements of §63.983(c), as referenced by §63.982(a)(1) and (2), do not apply.</td>
</tr>
<tr>
<td>§ 63.9</td>
<td>Notification Requirements</td>
<td>Yes, with the exception of §63.10(e). The requirements of §63.10(e) do not apply. In addition, the recordkeeping and reporting requirements specified in this subpart apply.</td>
</tr>
<tr>
<td>§ 63.10</td>
<td>Recordkeeping and Reporting Requirements</td>
<td>Yes.</td>
</tr>
<tr>
<td>§ 63.11</td>
<td>Flares</td>
<td>Yes.</td>
</tr>
<tr>
<td>§ 63.12</td>
<td>Delegation</td>
<td>Yes.</td>
</tr>
<tr>
<td>§ 63.13</td>
<td>Addresses</td>
<td>Yes.</td>
</tr>
<tr>
<td>§ 63.14</td>
<td>Incorporation by Reference</td>
<td>Yes.</td>
</tr>
<tr>
<td>§ 63.15</td>
<td>Availability of Information</td>
<td>Yes.</td>
</tr>
</tbody>
</table>

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

SOURCE: 68 FR 18025, Apr. 14, 2003, unless otherwise noted.

WHAT THIS SUBPART COVERS

§ 63.7280 What is the purpose of this subpart?

This subpart establishes national emission standards for hazardous air pollutants (NESHAP) for pushing, soaking, quenching, and battery stacks at coke oven batteries. This subpart also establishes requirements to demonstrate initial and continuous compliance with all applicable emission limitations, work practice standards, and operation and maintenance requirements in this subpart.

§ 63.7281 Am I subject to this subpart?

You are subject to this subpart if you own or operate a coke oven battery at a coke plant that is (or is part of) a major source of hazardous air pollutant (HAP) emissions. A major source of HAP is a plant site that emits or has the potential to emit any single HAP at a rate of 10 tons or more per year or any combination of HAP at a rate of 25 tons or more per year.

§ 63.7282 What parts of my plant does this subpart cover?

(a) This subpart applies to each new or existing affected source at your coke plant. The affected source is each coke oven battery.

(b) This subpart covers emissions from pushing, soaking, quenching, and battery stacks from each affected source.

(c) An affected source at your coke plant is existing if you commenced construction or reconstruction of the affected source before July 3, 2001.

(d) An affected source at your coke plant is new if you commenced construction or reconstruction of the affected source on or after July 3, 2001. An affected source is reconstructed if it meets the definition of “reconstruction” in §63.2.
§ 63.7283 When do I have to comply with this subpart?

(a) If you have an existing affected source, you must comply with each emission limitation, work practice standard, and operation and maintenance requirement in this subpart that applies to you no later than April 14, 2006.

(b) If you have a new affected source and its initial startup date is on or before April 14, 2003, you must comply with each emission limitation, work practice standard, and operation and maintenance requirement in this subpart that applies to you by April 14, 2003.

(c) If you have a new affected source and its initial startup date is after April 14, 2003, you must comply with each emission limitation, work practice standard, and operation and maintenance requirement in this subpart that applies to you upon initial start-up.

(d) You must meet the notification and schedule requirements in § 63.7340. Several of these notifications must be submitted before the compliance date for your affected source.


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

(a) You must not discharge to the atmosphere emissions of particulate matter from a control device applied to pushing emissions from a new or existing coke oven battery that exceed the applicable limit in paragraphs (a)(1) through (4) of this section:

1. 0.01 grain per dry standard cubic foot (gr/dscf) if a cokeside shed is used to capture emissions;

2. 0.02 pound per ton (lb/ton) of coke if a moveable hood vented to a stationary control device is used to capture emissions;

3. If a mobile scrubber car that does not capture emissions during travel is used:

(i) 0.03 lb/ton of coke for a control device applied to pushing emissions from a short battery, or

(ii) 0.01 lb/ton of coke for a control device applied to pushing emissions from a tall battery; and

4. 0.04 lb/ton of coke if a mobile control device that captures emissions during travel is used.

(b) You must meet each operating limit in paragraphs (b)(1) through (4) of this section that applies to you for a new or existing coke oven battery.

1. For each venturi scrubber applied to pushing emissions, you must maintain the daily average pressure drop and scrubber water flow rate at or above the minimum levels established during the initial performance test.

2. For each hot water scrubber applied to pushing emissions, you must maintain the daily average water pressure and water temperature at or above the minimum levels established during the initial performance test.

3. For each capture system applied to pushing emissions, you must maintain the daily average volumetric flow rate at the inlet of the control device at or above the minimum level established during the initial performance test; or

(i) For each capture system that uses an electric motor to drive the fan, you must maintain the daily average fan motor amperes at or above the minimum level established during the initial performance test; and

(ii) For each capture system that does not use a fan driven by an electric motor, you must maintain the daily average static pressure at the inlet to the control device at or above the minimum level established during the initial performance test or maintain the daily average fan revolutions per minute (RPM) at or above the minimum level established during the initial performance test.

4. For each multicyclone, you must maintain the daily average pressure drop at or below the minimum level established during the initial performance test.

§ 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?

(a) You must meet each requirement in paragraphs (a)(1) through (7) of this section for each new or existing by-product coke oven battery with vertical flues.

(1) Observe and record the opacity of fugitive pushing emissions from each oven at least once every 90 days. If an oven cannot be observed during a 90-day period due to circumstances that were not reasonably avoidable, you must observe the opacity of the first push of that oven following the close of the 90-day period that is capable of being observed in accordance with the procedures in § 63.7334(a), and you must document why the oven was not observed within a 90-day period. All opacity observations of fugitive pushing emissions for batteries with vertical flues must be made using the procedures in § 63.7334(a).

(2) If two or more batteries are served by the same pushing equipment and total no more than 90 ovens, the batteries as a unit can be considered a single battery.

(3) Observe and record the opacity of fugitive pushing emissions for at least four consecutive pushes per battery each day. Exclude any push during which the observer’s view is obstructed or obscured by interferences and observe the next available push to complete the set of four pushes. If necessary due to circumstances that were not reasonably avoidable, you may observe fewer than four consecutive pushes in a day; however, you must observe and record as many consecutive pushes as possible and document why four consecutive pushes could not be observed. You may observe and record one or more non-consecutive pushes in addition to any consecutive pushes observed in a day.

(4) Do not alter the pushing schedule to change the sequence of consecutive pushes to be observed on any day. Keep records indicating the legitimate operational reason for any change in your pushing schedule which results in a change in the sequence of consecutive pushes observed on any day.

(5) If the average opacity for any individual push exceeds 30 percent opacity for any short battery or 35 percent opacity for any tall battery, you must take corrective action and/or increase coking time for that oven. You must complete corrective action or increase coking time within either 10 calendar days or the number of days determined using Equation 1 of this section, whichever is greater:

$$X = 0.55 * Y \quad \text{(Eq. 1)}$$

Where:

- $X$ = Number of calendar days allowed to complete corrective action or increase coking time; and
- $Y$ = Current coking time for the oven, hours.

For the purpose of determining the number of calendar days allowed under Equation 1 of this section, day one is the first day following the day you observed an opacity in excess of 30 percent for any short battery or 35 percent for any tall battery. Any fraction produced by Equation 1 of this section must be counted as a whole day. Days during which the oven is removed from service are not included in the number of days allowed to complete corrective action.

(6)(i) You must demonstrate that the corrective action and/or increased coking time was successful. After a period of time no longer than the number of days allowed in paragraph (a)(5) of this section, observe and record the opacity of the first two pushes for the oven capable of being observed using the procedures in § 63.7334(a). The corrective action and/or increased coking time was successful if the average opacity for each of the two pushes is 30 percent or less for a short battery or 35 percent or less for a tall battery. If the corrective action and/or increased coking time was successful, you may return the oven to the 90-day reading rotation described in paragraph (a)(1) of this section. If the average opacity of either push exceeds 30 percent for a short battery or 35 percent for a tall battery, the corrective action and/or increased coking time was unsuccessful, and you must complete additional corrective action and/or increase coking time for that oven within the number of days allowed in paragraph (a)(5) of this section.
(ii) After implementing any additional corrective action and/or increased coking time required under paragraph (a)(6)(i) or (a)(7)(ii) of this section, you must demonstrate that corrective action and/or increased coking time was successful. After a period of time no longer than the number of days allowed in paragraph (a)(5) of this section, you must observe and record the opacity of the first two pushes for the oven capable of being observed using the procedures in §63.7334(a). The corrective action and/or increased coking time was successful if the average opacity for each of the two pushes is 30 percent or less for a short battery or 35 percent or less for a tall battery. If the corrective action and/or increased coking time was successful, you may return the oven to the 90-day reading rotation described in paragraph (a)(1) of this section. If the average opacity of either push exceeds 30 percent for a short battery or 35 percent for a tall battery, the attempt to qualify for a decreased coking time was unsuccessful. You must then return the oven to the previously established increased coking time, or implement other corrective action(s) and/or increased coking time. If you implement other corrective action and/or a coking time that is shorter than the previously established increased coking time, you must follow the procedures in paragraph (a)(6)(ii) of this section to confirm that the corrective action(s) and/or increased coking time was successful.

(iii) If the attempt to qualify for decreased coking time was unsuccessful as described in paragraph (a)(7)(ii) of this section, you may again attempt to qualify for decreased coking time for the oven. To do this, you must operate the oven on the decreased coking time. After no more than two coking cycles on the decreased coking time, you must observe and record the opacity of the first two pushes for the oven capable of being observed using the procedures in §63.7334(a). If the average opacity for each of the two pushes is 30 percent or less for a short battery or 35 percent or less for a tall battery, you may keep the oven on the decreased coking time and return the oven to the 90-day reading rotation described in paragraph (a)(1) of this section. If the average opacity of either push exceeds 30 percent for a short battery or 35 percent for a tall battery, the attempt to qualify for a decreased coking time was unsuccessful. You must then return the oven to the previously established increased coking time, or implement other corrective action(s) and/or increased coking time. If you implement other corrective action and/or a coking time that is shorter than the previously established increased coking time, you must follow the procedures in paragraph (a)(6)(ii) of this section to confirm that the corrective action(s) and/or increased coking time was successful.
§ 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?

(a) You must comply with each of the requirements in paragraphs (a)(1) through (4) of this section.

(1) Prepare and operate by a written plan that will eliminate or minimize incomplete coking for each by-product coke oven battery with horizontal flues. You must submit the plan and supporting documentation to the Administrator (or delegated authority) for approval no later than 90 days after completing all observations and measurements required for the study in paragraph (a)(3) of this section or April 14, 2004, whichever is earlier. You must begin operating by the plan requirements by the compliance date that is specified in § 63.7283. The written plan must identify minimum flue temperatures for different coking times and a battery-wide minimum acceptable flue temperature for any oven at any coking time.

(2) Submit the written plan and supporting documentation to the Administrator (or delegated authority) for review and approval. Include all data collected during the study described in paragraph (a)(3) of this section. If the Administrator (or delegated authority) disapproves the plan, you must revise the plan as directed by the Administrator (or delegated authority) and submit the amended plan for approval. The Administrator (or delegated authority) may require you to collect and submit additional data. You must operate according to your submitted plan (or submitted amended plan, if any) until the Administrator (or delegated authority) approves your plan.

(3) You must base your written plan on a study that you conduct that meets each of the requirements listed in paragraphs (a)(3) through (x) of this section.

(i) Initiate the study by July 14, 2003. Notify the Administrator (or delegated authority) at least 7 days prior to initiating the study according to the requirements in § 63.7340(f).

(ii) Conduct the study under representative operating conditions, including but not limited to the range of moisture content and volatile matter in the coal that is charged.

(iii) Include every oven in the study and observe at least two pushes from each oven.

(iv) For each push observed, measure and record the temperature of every flue within 2 hours before the scheduled pushing time. Document the oven number, date, and time the oven was charged and pushed, and calculate the net coking time.

(v) For each push observed, document the factors to be used to identify pushes that are incompletely coked. These factors must include (but are not limited to): average opacity during the push, average opacity during travel to the quench tower, average of six highest consecutive observations during both push and travel, highest single opacity reading, color of the emissions (especially noting any yellow or brown emissions), presence of excessive smoke during travel to the quench tower, percent volatile matter in the coke, percent volatile matter and percent moisture in the coal that is charged, and the date the oven was last rebuilt or completely relined. Additional documentation may be provided in the form of pictures or videotape of emissions during the push and travel. All opacity observations must be conducted in accordance with the procedures in § 63.7334(a)(3) through (7).

(vi) Inspect the inside walls of the oven after each observed push for cool spots as indicated by a flue that is darker than others (the oven walls should be red hot) and record the results.
(vii) For each push observed, note where incomplete coking occurs if possible (e.g., coke side end, pusher side end, top, or center of the coke mass). For any push with incomplete coking, investigate and document the probable cause.

(viii) Use the documented factors in paragraph (a)(3)(v) of this section to identify pushes that were completely coked and those that were not completely coked. Provide a rationale for the determination based on the documentation of factors observed during the study.

(ix) Use only the flue temperature and coking time data for pushes that were completely coked to identify minimum flue temperatures for various coking times. Submit the criteria used to determine complete coking, as well as a table of coking times and corresponding temperatures for complete coking as part of your plan.

(x) Determine the battery-wide minimum acceptable flue temperature for any oven. This temperature will be equal to the lowest temperature that provided complete coking as determined in paragraph (a)(3)(ix) of this section.

(4) You must operate according to the coking times and temperatures in your approved plan and the requirements in paragraphs (a)(4)(i) through (viii) of this section.

(i) Measure and record the percent volatile matter in the coal that is charged.

(ii) Measure and record the temperature of all flues on two ovens per day within 2 hours before the scheduled pushing time for each oven. Measure and record the temperature of all flues on each oven at least once each month.

(iii) For each oven observed in accordance with paragraph (a)(4)(ii) of this section, record the time each oven is charged and pushed and calculate and record the net coking time. If any measured flue temperature for an oven is below the minimum flue temperature for an oven’s scheduled coking time as established in the written plan, increase the coking time for the oven to the coking time in the written plan for the observed flue temperature before pushing the oven.

(iv) If you increased the coking time for any oven in accordance with paragraph (a)(4)(iii) of this section, you must investigate the cause of the low flue temperature and take corrective action to fix the problem. You must continue to measure and record the temperature of all flues for the oven within 2 hours before each scheduled pushing time until the measurements meet the minimum temperature requirements for the increased coking time for two consecutive pushes. If any measured flue temperature for an oven on increased coking time falls below the minimum flue temperature for the increased coking time, as established in the written plan, you must increase the coking time for the oven to the coking time specified in the written plan for the observed flue temperature before pushing the oven. The oven must continue to operate at this coking time (or at a longer coking time if the temperature falls below the minimum allowed for the increased coking time) until the problem has been corrected, and you have confirmed that the corrective action was successful as required by paragraph (a)(4)(v) of this section.

(v) Once the heating problem has been corrected, the oven may be returned to the battery’s normal coking schedule. You must then measure and record the flue temperatures for the oven within 2 hours before the scheduled pushing time for the next two consecutive pushes. If any flue temperature measurement is below the minimum flue temperature for that coking time established in the written plan, repeat the procedures in paragraphs (a)(4)(iii) and (iv) of this section.

(vi) If any flue temperature measurement is below the battery-wide minimum acceptable temperature for complete coking established in the written plan for any oven at any coking time, you must remove the oven from service for repairs.

(vii) For an oven that has been repaired and returned to service after being removed from service in accordance with paragraph (a)(4)(vi) of this section, you must measure and record the temperatures of all flues for the oven within 2 hours before the first scheduled pushing time. If any flue
§ 63.7293 What work practice standards must I meet for fugitive pushing emissions if I have a non-recovery coke oven battery?

(a) You must meet the requirements in paragraphs (a)(1) and (2) of this section for each new and existing non-recovery coke oven battery.

(1) You must visually inspect each oven prior to pushing by opening the door damper and observing the bed of coke.

(2) Do not push the oven unless the visual inspection indicates that there is no smoke in the open space above the coke bed and that there is an unobstructed view of the door on the opposite side of the oven.

(b) As provided in §63.6(g), you may request to use an alternative to the work practice standard in paragraph (a) of this section.

§ 63.7294 What work practice standard must I meet for soaking?

(a) For each new and existing by-product coke oven battery, you must prepare and operate at all times according to a written work practice plan for soaking. Each plan must include measures and procedures to:

(1) Train topside workers to identify soaking emissions that require corrective actions.

(2) Damper the oven off the collecting main prior to opening the standpipe cap.

(b) As provided in §63.6(g), you may request to use an alternative to the work practice standard in paragraph (a) of this section.

§ 63.7295 What requirements must I meet for quenching?

(a) You must meet the requirements in paragraphs (a)(1) and (2) of this section for each quench tower and backup quench station at a new or existing coke oven battery.

(1) For the quenching of hot coke, you must meet the requirements in paragraph (a)(1)(i) or (ii) of this section.

(i) The concentration of total dissolved solids (TDS) in the water used for quenching must not exceed 1,100 milligrams per liter (mg/L); or

(ii) The sum of the concentrations of benzene, benzo(a)pyrene, and naphthalene in the water used for quenching must not exceed the applicable site-specific limit approved by the permitting authority.

(2) You must use acceptable makeup water, as defined in §63.7352, as makeup water for quenching.

(b) For each quench tower at a new or existing coke oven battery and each backup quench station at a new coke oven battery, you must:

(3) Determine the cause of soaking emissions that do not ignite automatically, including emissions that result from raw coke oven gas leaking from the collecting main through the damper, and emissions that result from incomplete coking.

(4) If soaking emissions are caused by leaks from the collecting main, take corrective actions to eliminate the soaking emissions. Corrective actions may include, but are not limited to, reseating the damper, cleaning the flushing liquor piping, using aspiration, putting the oven back on the collecting main, or igniting the emissions.

(5) If soaking emissions are not caused by leaks from the collecting main, notify a designated responsible party. The responsible party must determine whether the soaking emissions are due to incomplete coking. If incomplete coking is the cause of the soaking emissions, you must put the oven back on the collecting main until it is completely coked or you must ignite the emissions.

(6) As provided in §63.6(g), you may request to use an alternative to the work practice standard in paragraph (a) of this section.
oven battery, you must meet each of the requirements in paragraphs (b)(1) through (4) of this section.

(1) You must equip each quench tower with baffles such that no more than 5 percent of the cross sectional area of the tower may be uncovered or open to the sky.

(2) You must wash the baffles in each quench tower once each day that the tower is used to quench coke, except as specified in paragraphs (b)(2)(i) and (ii) of this section.

(i) You are not required to wash the baffles in a quench tower if the highest measured ambient temperature remains less than 30 degrees Fahrenheit throughout that day (24-hour period). If the measured ambient temperature rises to 30 degrees Fahrenheit or more during the day, you must resume daily washing according to the schedule in your operation and maintenance plan.

(ii) You must continuously record the ambient temperature on days that the baffles were not washed.

(3) You must inspect each quench tower monthly for damaged or missing baffles and blockage.

(4) You must initiate repair or replacement of damaged or missing baffles within 30 days and complete as soon as practicable.

(c) As provided in §63.6(g), you may request to use an alternative to the work practice standards in paragraph (b) of this section.

§ 63.7296 What emission limitations must I meet for battery stacks?
You must not discharge to the atmosphere any emissions from any battery stack at a new or existing by-product coke oven battery that exhibit an opacity greater than the applicable limit in paragraphs (a) and (b) of this section.

(a) Daily average of 15 percent opacity for a battery on a normal coking cycle.

(b) Daily average of 20 percent opacity for a battery on batterywide extended coking.

§ 63.7300 What are my operation and maintenance requirements?

(a) As required by §63.6(e)(1)(i), you must always operate and maintain your affected source, including air pollution control and monitoring equipment, in a manner consistent with good air pollution control practices for minimizing emissions at least to the levels required by this subpart.

(b) You must prepare and operate at all times according to a written operation and maintenance plan for the general operation and maintenance of new or existing by-product coke oven batteries. Each plan must address, at a minimum, the elements listed in paragraphs (b)(1) through (6) of this section.

(1) Frequency and method of recording underfiring gas parameters.

(2) Frequency and method of recording battery operating temperature, including measurement of individual flue and cross-wall temperatures.

(3) Procedures to prevent pushing an oven before it is fully coked.

(4) Procedures to prevent overcharging and undercharging of ovens, including measurement of coal moisture, coal bulk density, and procedures for determining volume of coal charged.

(5) Frequency and procedures for inspecting flues, burners, and nozzles.

(6) Schedule and procedures for the daily washing of baffles.

(c) You must prepare and operate at all times according to a written operation and maintenance plan for each capture system and control device applied to pushing emissions from a new or existing coke oven battery. Each plan must address at a minimum the elements in paragraphs (c)(1) through (3) of this section.

(1) Monthly inspections of the equipment that are important to the performance of the total capture system (e.g., pressure sensors, dampers, and damper switches). This inspection must 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). In the event a defect or deficiency is found in the capture system (during a monthly inspection or between inspections), you must complete repairs within 30 days after the date that the defect or deficiency is discovered. If you determine that the repairs cannot be completed within 30 days, you must submit a written request for an extension of time to complete the repairs that must be received by the permitting authority not more than 20 days after the date that the defect or deficiency is discovered. The request must contain a description of the defect or deficiency, the steps needed and taken to correct the problem, the interim steps being taken to mitigate the emissions impact of the defect or deficiency, and a proposed schedule for completing the repairs. The request shall be deemed approved unless and until such time as the permitting authority notifies you that it objects to the request. The permitting authority may consider all relevant factors in deciding whether to approve or deny the request. Each approved schedule must provide for completion of repairs as expeditiously as practicable, and the permitting authority may request modifications to the proposed schedule as part of the approval process.

(2) Preventative maintenance for each control device, including a preventative maintenance schedule that is consistent with the manufacturer’s instructions for routine and long-term maintenance.

(3) Corrective action for all baghouses applied to pushing emissions. In the event a bag leak detection system alarm is triggered, you must initiate corrective action to determine the cause of the alarm within 1 hour of the alarm, initiate corrective action to correct the cause of the problem within 24 hours of the alarm, and complete the corrective action as soon as practicable. Actions may include, but are not limited to:

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

(ii) Sealing off defective bags or filter media.

(iii) Replacing defective bags or filter media or otherwise repairing the control device.

(iv) Sealing off a defective baghouse compartment.

(v) Cleaning the bag leak detection system probe, or otherwise repairing the bag leak detection system.

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


GENERAL COMPLIANCE REQUIREMENTS

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

(a) You must be in compliance with the emission limitations, work practice standards, and operation and maintenance requirements in this subpart at all times, except during periods of startup, shutdown, and malfunction as defined in §63.2.

(b) During the period between the compliance date specified for your affected source in §63.7283 and the date upon which continuous monitoring systems have been installed and certified and any applicable operating limits have been set, you must maintain a log detailing the operation and maintenance of the process and emissions control equipment.


INITIAL COMPLIANCE REQUIREMENTS

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

(a) As required in §63.7(a)(2), you must conduct a performance test to demonstrate compliance with each limit in §63.7290(a) for emissions of particulate matter from a control device applied to pushing emissions that applies to you within 180 calendar days after the compliance date that is specified in §63.7283.

(b) You must conduct performance tests to demonstrate compliance with the TDS limit or constituent limit for quench water in §63.7295(a)(1) and each
opacity limit in §63.7297(a) for a by-product coke oven battery stack by the compliance date that is specified in §63.7283.

(c) For each work practice standard and operation and maintenance requirement that applies to you, you must demonstrate initial compliance within 30 calendar days after the compliance date that is specified in §63.7283.

(d) If you commenced construction or reconstruction between July 3, 2001 and April 14, 2003, you must demonstrate initial compliance with either the proposed emission limit or the promulgated emission limit no later than October 14, 2003, or no later than 180 calendar days after startup of the source, whichever is later, according to §63.7(a)(2)(ix).

(e) If you commenced construction or reconstruction between July 3, 2001 and April 14, 2003, and you chose to comply with the proposed emission limit when demonstrating initial compliance, you must conduct a second performance test to demonstrate compliance with the promulgated emission limit by October 11, 2006, or after startup of the source, whichever is later, according to §63.7(a)(2)(ix).

§63.7321 When must I conduct subsequent performance tests?

For each control device subject to an emission limit for particulate matter in §63.7296(a), you must conduct subsequent performance tests no less frequently than twice (at mid-term and renewal) during each term of your title V operating permit.

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

(a) You must conduct each performance test that applies to your affected source according to the requirements in paragraph (b) of this section.

(b) To determine compliance with the emission limit for particulate matter from a control device applied to pushing emissions where a cokeside shed is not used, follow the test methods and procedures in paragraphs (b)(1) through (4) of this section.

(1) Determine the concentration of particulate matter according to the following test methods in appendix A to 40 CFR part 60.

(i) Method 1 to select sampling port locations and the number of traverse points. Sampling sites must be located at the outlet of the control device and prior to any release to the atmosphere.

(ii) Method 2, 2F, or 2G to determine the volumetric flow rate of the stack gas.

(iii) Method 3, 3A, or 3B to determine the dry molecular weight of the stack gas.

(iv) Method 4 to determine the moisture content of the stack gas.

(v) Method 5 or 5D, as applicable, to determine the concentration of front half particulate matter in the stack gas.

(2) During each particulate matter test run, sample only during periods of actual pushing when the capture system fan and control device are engaged. Collect a minimum sample volume of 30 dry standard cubic feet of gas during each test run. Three valid test runs are needed to comprise a performance test. Each run must start at the beginning of a push and finish at the end of a push (i.e., sample for an integral number of pushes).

(3) Determine the total combined weight in tons of coke pushed during the duration of each test run according to the procedures in your source test plan for calculating coke yield from the quantity of coal charged to an individual oven.

(4) Compute the process-weighted mass emissions (E_p) for each test run using Equation 1 of this section as follows:

\[ E_p = \frac{C \times Q \times T}{P \times K} \]  

(Eq. 1)

Where:

- \( E_p \) = Process weighted mass emissions of particulate matter, lb/ton;
§ 63.7323 What procedures must I use to establish operating limits?

(a) For a venturi scrubber applied to pushing emissions from a coke oven battery, you must establish site-specific operating limits for pressure drop and scrubber water flow rate according to the procedures in paragraphs (a)(1) and (2) of this section.

(1) Using the continuous parameter monitoring systems (CPMS) required in §63.7330(b), measure and record the pressure drop and scrubber water flow rate for each particulate matter test run during periods of pushing. A minimum of one pressure drop measurement and one scrubber water flow rate measurement must be obtained for each push.

(2) Compute and record the average pressure drop and scrubber water flow rate for each test run. Your operating limits are the lowest average pressure drop and scrubber water flow rate values recorded during any of the three runs that meet the applicable emission limit.

(b) For a hot water scrubber applied to pushing emissions from a coke oven battery, you must establish site-specific operating limits for water pressure and temperature according to the procedures in paragraphs (b)(1) and (2) of this section.

(1) Using the CPMS required in §63.7330(c), measure and record the hot water pressure and temperature for each particulate matter test run during periods of pushing. A minimum of one pressure measurement and one temperature measurement must be made just prior to each push by monitoring the hot water holding tank on the mobile scrubber car.

(2) Compute and record the average water pressure and temperature for each test run. Your operating limits are the lowest pressure and temperature values recorded during any of the three runs that meet the applicable emission limit.

(c) For a capture system applied to pushing emissions from a coke oven battery, you must establish a site-specific operating limit according to the procedures in paragraphs (c)(1), (2), or (3) of this section.

(1) If you elect the operating limit in §63.7290(b)(3) for volumetric flow rate, measure and record the total volumetric flow rate at the inlet of the control device during each push sampled for each particulate matter test run. Your operating limit is the lowest volumetric flow rate recorded during any of the three runs that meet the emission limit.

(2) If you elect the operating limit in §63.7290(b)(3)(i) for fan motor amperes, measure and record the fan motor amperes during each push sampled for each particulate matter test run. Your operating limit is the lowest fan motor amperes recorded during any of the three runs that meet the emission limit.

(3) If you elect the operating limit in §63.7290(b)(3)(i) for static pressure or fan RPM, measure and record the static pressure at the inlet of the control device or fan RPM during each push sampled for each particulate matter test run. Your operating limit for static pressure is the minimum vacuum recorded during any of the three runs that meet the emission limit. Your operating limit for fan RPM is the lowest fan RPM recorded during any of the three runs that meet the emission limit.

(d) For a multicyclone applied to pushing emissions from a coke oven battery, you must establish a site-specific operating limit for pressure drop according to the procedures in paragraphs (d)(1) and (2) of this section.

(1) Using the CPMS required in §63.7330(f), measure and record the pressure drop for each particulate matter test run during periods of pushing. A minimum of one pressure drop measurement must be obtained for each push.

(2) Compute and record the average pressure drop for each test run. Your operating limit is the highest average pressure drop.
Environmental Protection Agency  

§ 63.7325
pressure drop value recorded during any of the three runs that meet the emission limit.

(e) You may change the operating limit for a venturi scrubber, capture system, or mobile control device that captures emissions during pushing if you meet the requirements in paragraphs (e)(1) through (3) of this section.

(1) Submit a written notification to the Administrator of your request to conduct a new performance test to revise the operating limit.

(2) Conduct a performance test to demonstrate that emissions of particulate matter from the control device do not exceed the applicable limit in §63.7290(a).

(3) Establish revised operating limits according to the applicable procedures in paragraphs (a) through (d) of this section.

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

(a) You must conduct each performance test that applies to your affected source according to the requirements in paragraph (b) of this section.

(b) To determine compliance with the daily average opacity limit for stacks of 15 percent for a by-product coke oven battery on a normal coking cycle or 20 percent for a by-product coke oven battery on batterywide extended coking, follow the test methods and procedures in paragraphs (b)(1) through (3) of this section.

(1) Using the continuous opacity monitoring system (COMS) required in §63.7330(e), measure and record the opacity of emissions from each battery stack for a 24-hour period.

(2) Reduce the monitoring data to hourly averages as specified in §63.8(g)(2).

(3) Compute and record the 24-hour (daily) average of the COMS data.

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

(a) If you elect the TDS limit for quench water in §63.7295(a)(1)(i), you must conduct each performance test that applies to your affected source according to the conditions in paragraphs (a)(1) and (2) of this section.

(1) Take the quench water sample from a location that provides a representative sample of the quench water as applied to the coke (e.g., from the header that feeds water to the quench tower reservoirs). Conduct sampling under normal and representative operating conditions.

(2) Determine the TDS concentration of the sample using Method 160.1 in 40 CFR part 136.3 (see “residue—filterable”), except that you must dry the total filterable residue at 103 to 105 °C (degrees Centigrade) instead of 180 °C.

(b) If at any time you elect to meet the alternative requirements for quench water in §63.7295(a)(1)(ii), you must establish a site-specific constituent limit according to the procedures in paragraphs (b)(1) through (4) of this section.

(1) Take a minimum of nine quench water samples from a location that provides a representative sample of the quench water as applied to the coke (e.g., from the header that feeds water to the quench tower reservoirs). Conduct sampling under normal and representative operating conditions.

(2) For each sample, determine the TDS concentration according to the requirements in paragraph (a)(2) of this section and the concentration of benzene, benzo(a)pyrene, and naphthalene using the applicable methods in 40 CFR part 136 or an approved alternative method.

(3) Determine and record the highest sum of the concentrations of benzene, benzo(a)pyrene, and naphthalene in any sample that has a TDS concentration less than or equal to the TDS limit of 1,100 mg/L. This concentration is the site-specific constituent limit.

(4) Submit the site-specific limit, sampling results, and all supporting data and calculations to your permitting authority for review and approval.

(c) If you elect the constituent limit for quench water in §63.7295(a)(1)(ii), you must conduct each performance test that applies to your affected source according to the conditions in paragraphs (c)(1) and (2) of this section.
§ 63.7326 How do I demonstrate initial compliance with the emission limitations that apply to me?

(a) For each coke oven battery subject to the emission limit for particulate matter from a control device applied to pushing emissions, you have demonstrated initial compliance if you meet the requirements in paragraphs (a)(1) through (4) of this section that apply to you.

(1) The concentration of particulate matter, measured in accordance with the performance test procedures in §63.7322(b)(1) and (2), did not exceed 0.01 gr/dscf for a control device where a cokeside shed is used to capture pushing emissions or the process-weighted mass rate of particulate matter (lb/ton of coke), measured in accordance with the performance test procedures in §63.7322(b)(1) through (4), did not exceed:

(i) 0.02 lb/ton of coke if a moveable hood vented to a stationary control device is used to capture emissions;

(ii) If a mobile scrubber car that does not capture emissions during travel is used, 0.03 lb/ton of coke from a control device applied to pushing emissions from a short coke oven battery or 0.01 lb/ton of coke from a control device applied to pushing emissions from a tall coke oven battery; and

(iii) 0.04 lb/ton of coke if a mobile control device that captures emissions during travel is used.

(2) For each venturi scrubber applied to pushing emissions, you have established appropriate site-specific operating limits and have a record of the pressure drop and scrubber water flow rate measured during the performance test in accordance with §63.7323(a).

(3) For each hot water scrubber applied to pushing emissions, you have established appropriate site-specific operating limits and have a record of the water pressure and temperature measured during the performance test in accordance with §63.7323(b).

(4) For each capture system applied to pushing emissions, you have established an appropriate site-specific operating limit, and:

(i) If you elect the operating limit in §63.7290(b)(3) for volumetric flow rate, you have a record of the total volumetric flow rate at the inlet of the control device measured during the performance test in accordance with §63.7323(c)(1); or

(ii) If you elect the operating limit in §63.7290(b)(3)(i) for fan motor amperes, you have a record of the fan motor amperes during the performance test in accordance with §63.7323(c)(2); or

(iii) If you elect the operating limit in §63.7290(b)(3)(ii) for static pressure or fan RPM, you have a record of the static pressure at the inlet of the control device or fan RPM measured during the performance test in accordance with §63.7323(c)(3).

(5) For each multicycle applied to pushing emissions, you have established an appropriate site-specific operating limit and have a record of the pressure drop measured during the performance test in accordance with §63.7323(d).

(b) For each new or existing by-product coke oven battery subject to the opacity limit for stacks in §63.7296(a), you have demonstrated initial compliance if the daily average opacity, as measured according to the performance test procedures in §63.7296(b), is no more than 15 percent for a battery on a normal coking cycle or 20 percent for a battery on batterywide extended coking.

(c) For each new or existing by-product coke oven battery subject to the TDS limit or constituent limits for quench water in §63.7295(a)(1),

(1) You have demonstrated initial compliance with the TDS limit in §63.7295(a)(1)(i) if the TDS concentration, as measured according to the performance test procedures in §63.7295(a), does not exceed 1,100 mg/L.
§ 63.7328 How do I demonstrate initial compliance with the constituent limit in § 63.7295(a)(i)(ii) if:

(i) You have established a site-specific constituent limit according to the procedures in § 63.7325(b); and

(ii) The sum of the constituent concentrations, as measured according to the performance test procedures in § 63.7325(c), is less than or equal to the site-specific limit.

(d) For each by-product coke oven battery stack subject to the requirements for quench water in § 63.7295(a)(1), you must submit a notification of compliance status containing the results of the COMS performance test for battery stacks and the quench water performance test (TDS or constituent limit) according to § 63.7340(e)(1). For each particulate matter emission limitation that applies to you, you must submit a notification of compliance status containing the results of the performance test according to § 63.7340(e)(2).

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

(a) For each by-product coke oven battery with vertical flues subject to the work practice standards for fugitive pushing emissions in § 63.7291(a), you have demonstrated initial compliance if you certify in your notification of compliance status that you will meet each of the work practice requirements beginning no later than the compliance date that is specified in § 63.7283.

(b) For each by-product coke oven battery with horizontal flues subject to the work practice standards for fugitive pushing emissions in § 63.7292(a), you have demonstrated initial compliance if you have met the requirements of paragraphs (b)(1) and (2) of this section:

(1) You have prepared and submitted a written work practice plan in accordance with § 63.7294(a); and

(2) You certify in your notification of compliance status that you will meet each of the work practice requirements beginning no later than the compliance date that is specified in § 63.7283.

(e) For each coke oven battery, you have demonstrated initial compliance with the work practice standards for quenching in § 63.7295(b) if you certify in your notification of compliance status that you will meet each of the work practice requirements beginning no later than the compliance date that is specified in § 63.7283.

(f) For each work practice standard that applies to you, you must submit a notification of compliance status according to the requirements in § 63.7340(e)(1).

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

You have demonstrated initial compliance if you certify in your notification of compliance status that you
have met the requirements of paragraphs (a) through (d) of this section:

(a) You have prepared the operation and maintenance plans according to the requirements in §63.7300(b) and (c);
(b) You will operate each by-product coke oven battery and each capture system and control device applied to pushing emissions from a coke oven battery according to the procedures in the plans beginning no later than the compliance date that is specified in §63.7293;
(c) You have prepared a site-specific monitoring plan according to the requirements in §63.7331(b); and
(d) You submit a notification of compliance status according to the requirements in §63.7340(e).

CONTINUOUS COMPLIANCE REQUIREMENTS

§ 63.7330 What are my monitoring requirements?

(a) For each baghouse applied to pushing emissions from a coke oven battery, you must at all times monitor the relative change in particulate matter loadings using a bag leak detection system according to the requirements in §63.7331(a) and conduct inspections at their specified frequency according to the requirements in paragraphs (a)(1) through (8) of this section.
(1) Monitor the pressure drop across each baghouse cell each day to ensure pressure drop is within the normal operating range identified in the manual;
(2) Confirm that dust is being removed from hoppers through weekly visual inspections or equivalent means of ensuring the proper functioning of removal mechanisms;
(3) Check the compressed air supply for pulse-jet baghouses each day;
(4) Monitor cleaning cycles to ensure proper operation using an appropriate methodology;
(5) Check bag cleaning mechanisms for proper functioning through monthly visual inspection or equivalent means;
(6) Make monthly visual checks of bag tension on reverse air and shaker-type baghouses to ensure that bags are not kinked (kneed or bent) or laying on their sides. You do not have to make this check for shaker-type baghouses using self-tensioning (spring-loaded) devices;
(7) Confirm the physical integrity of the baghouse through quarterly visual inspections of the baghouse interior for air leaks; and
(8) Inspect fans for wear, material buildup, and corrosion through quarterly visual inspections, vibration detectors, or equivalent means.

(b) For each venturi scrubber applied to pushing emissions, you must at all times monitor the pressure drop and water flow rate using a CPMS according to the requirements in §63.7331(e).
(c) For each hot water scrubber applied to pushing emissions, you must at all times monitor the water pressure and temperature using a CPMS according to the requirements in §63.7331(f).
(d) For each capture system applied to pushing emissions, you must at all times monitor the volumetric flow rate according to the requirements in §63.7331(g), the fan motor amperes according to the requirements in §63.7331(h), or the static pressure or the fan RPM according to the requirements in §63.7331(i).
(e) For each by-product coke oven battery, you must monitor at all times the opacity of emissions exiting each stack using a COMS according to the requirements in §63.7331(j).
(f) For each multicyclone applied to pushing emissions, you must monitor at all times the pressure drop using a CPMS according to the requirements in §63.7331(k).


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

(a) For each baghouse applied to pushing emissions, you must install, operate, and maintain each bag leak detection system according to the requirements in paragraphs (a)(1) through (7) of this section.
(1) The system must be certified by the manufacturer to be capable of detecting emissions of particulate matter at concentrations of 10 milligrams per actual cubic meter (0.0044 grains per actual cubic foot) or less;
(2) The system must provide output of relative changes in particulate matter loadings;
(3) The system must be equipped with an alarm that will sound when an increase in relative particulate loadings is detected over a preset level. The alarm must be located such that it can be heard by the appropriate plant personnel;

(4) Each system that works based on the triboelectric effect must be installed, operated, and maintained in a manner consistent with the guidance document, “Fabric Filter Bag Leak Detection Guidance” (EPA–454/R–98–015, September 1997). You may install, operate, and maintain other types of bag leak detection systems in a manner consistent with the manufacturer’s written specifications and recommendations;

(5) To make the initial adjustment of the system, establish the baseline output by adjusting the sensitivity (range) and the averaging period of the device. Then, establish the alarm set points and the alarm delay time;

(6) Following the initial adjustment, do not adjust the sensitivity or range, averaging period, alarm set points, or alarm delay time, except as detailed in your operation and maintenance plan. Do not increase the sensitivity by more than 100 percent or decrease the sensitivity by more than 50 percent over a 365-day period unless a responsible official certifies, in writing, that the baghouse has been inspected and found to be in good operating condition; and

(7) Where multiple detectors are required, the system’s instrumentation and alarm may be shared among detectors.

(b) For each CPMS required in §63.7330, you must develop and make available for inspection upon request by the permitting authority a site-specific monitoring plan that addresses the requirements in paragraphs (b)(1) through (6) of this section.

(1) Installation of the CPMS sampling probe or other interface at a measurement location relative to each affected process unit such that the measurement is representative of control of the exhaust emissions (e.g., on or downstream of the last control device);

(2) Performance and equipment specifications for the sample interface, the parametric signal analyzer, and the data collection and reduction system;

(3) Performance evaluation procedures and acceptance criteria (e.g., calibrations);

(4) Ongoing operation and maintenance procedures in accordance with the general requirements of §§63.8(c)(1), (3), (4)(ii), (7), and (8);

(5) Ongoing data quality assurance procedures in accordance with the general requirements of §63.8(d); and

(6) Ongoing recordkeeping and reporting procedures in accordance with the general requirements of §§63.10(c), (e)(1), and (e)(2)(i).

(c) You must conduct a performance evaluation of each CPMS in accordance with your site-specific monitoring plan.

(d) You must operate and maintain the CPMS in continuous operation according to the site-specific monitoring plan.

(e) For each venturi scrubber applied to pushing emissions, you must install, operate, and maintain CPMS to measure and record the pressure drop across the scrubber and scrubber water flow rate during each push according to the requirements in paragraphs (b) through (d) of this section except as specified in paragraphs (e)(1) through (3) of this section.

(1) Each CPMS must complete a measurement at least once per push;

(2) Each CPMS must produce valid data for all pushes; and

(3) Each CPMS must determine and record the daily (24-hour) average of all recorded readings.

(f) For each hot water scrubber applied to pushing emissions, you must install, operate, and maintain CPMS to measure and record the water pressure and temperature during each push according to the requirements in paragraphs (b) through (d) of this section except as specified in paragraphs (e)(1) through (3) of this section.

(g) If you elect the operating limit in §63.7290(b)(3) for a capture system applied to pushing emissions, you must install, operate, and maintain a device to measure the total volumetric flow rate at the inlet of the control device.

(h) If you elect the operating limit in §63.7290(b)(3)(i) for a capture system applied to pushing emissions, you must
install, operate, and maintain a device to measure the fan motor amperes.

(i) If you elect the operating limit in §63.7290(b)(3)(ii) for a capture system applied to pushing emissions, you must install, operate and maintain a device to measure static pressure at the inlet of the control device or the fan RPM.

(j) For each by-product coke oven battery, you must install, operate, and maintain a COMS to measure and record the opacity of emissions exiting each stack according to the requirements in paragraphs (i)(1) through (5) of this section.

(1) You must install, operate, and maintain each COMS according to the requirements in §63.8(e) and Performance Specification 1 in 40 CFR part 60, appendix B. Identify periods the COMS is out-of-control, including any periods that the COMS fails to pass a daily calibration drift assessment, quarterly performance audit, or annual zero alignment audit.

(2) You must conduct a performance evaluation of each COMS according to the requirements in §63.8 and Performance Specification 1 in appendix B to 40 CFR part 60;

(3) You must develop and implement a quality control program for operating and maintaining each COMS according to the requirements in §63.8(d). At minimum, the quality control program must include a daily calibration drift assessment, quarterly performance audit, and an annual zero alignment audit of each COMS;

(4) Each COMS must 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. You must reduce the COMS data as specified in §63.8(g)(2).

(5) You must determine and record the hourly and daily (24-hour) average opacity according to the procedures in §63.7324(b) using all the 6-minute averages collected for periods during which the COMS is not out-of-control.

(k) For each multicyclone applied to pushing emissions, you must install, operate, and maintain CPMS to measure and record the pressure drop across each multicyclone during each push according to the requirements in paragraphs (b) through (d) of this section except as specified in paragraphs (e)(1) through (3) of this section.


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

(a) 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 (or collect data at all required intervals) at all times the affected source is operating.

(b) 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, or in fulfilling a minimum data availability requirement, if applicable. You must use all the data collected during all other periods in assessing compliance. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitor to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions.

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

(a) For each control device applied to pushing emissions and subject to the emission limit in §63.7290(a), you must demonstrate continuous compliance by meeting the requirements in paragraphs (a)(1) through (4); and

(1) Maintaining emissions of particulate matter at or below the applicable limits in paragraphs §63.7290(a)(1) through (4);

(2) Conducting subsequent performance tests to demonstrate continuous compliance no less frequently than twice during each term of your title V operating permit (at mid-term and renewal).

(b) For each venturi scrubber applied to pushing emissions and subject to the operating limits in §63.7290(b)(1), you must demonstrate continuous compliance by meeting the requirements in
Environmental Protection Agency

§ 63.7333

paragraphs (b)(1) through (3) of this section.

(1) Maintaining the daily average pressure drop and scrubber water flow rate at levels no lower than those established during the initial or subsequent performance test.

(2) Operating and maintaining each CPMS according to §63.7331(b) and recording all information needed to document conformance with these requirements.

(3) Collecting and reducing monitoring data for pressure drop and scrubber water flow rate according to §63.7331(e)(1) through (3).

(c) For each hot water scrubber applied to pushing emissions and subject to the operating limits in §63.7290(b)(2), you must demonstrate continuous compliance by meeting the requirements in paragraphs (c)(1) through (3) of this section.

(1) Maintaining the daily average water pressure and temperature at levels no lower than those established during the initial or subsequent performance test.

(2) Operating and maintaining each CPMS according to §63.7331(b) and recording all information needed to document conformance with these requirements.

(3) Collecting and reducing monitoring data for water pressure and temperature according to §63.7331(f).

(d) For each capture system applied to pushing emissions and subject to the operating limit in §63.7290(b)(3), you must demonstrate continuous compliance by meeting the requirements in paragraph (d)(1), (2), or (3) of this section:

(1) If you elect the operating limit for volumetric flow rate in §63.7290(b)(3):
   (i) Maintaining the daily average volumetric flow rate at the inlet of the control device at or above the minimum level established during the initial or subsequent performance test; and
   (ii) Checking the volumetric flow rate at least every 8 hours to verify the daily average is at or above the minimum level established during the initial or subsequent performance test and recording the results of each check.

(2) If you elect the operating limit for fan motor amperes in §63.7290(b)(3)(i):
   (i) Maintaining the daily average fan motor amperages at or above the minimum level established during the initial or subsequent performance test; and
   (ii) Checking the fan motor amperage at least every 8 hours to verify the daily average is at or above the minimum level established during the initial or subsequent performance test and recording the results of each check.

(3) If you elect the operating limit for static pressure or fan RPM in §63.7290(b)(3)(ii):
   (i) Maintaining the daily average static pressure at the inlet to the control device at an equal or greater vacuum than established during the initial or subsequent performance test or the daily average fan RPM at or above the minimum level established during the initial or subsequent performance test; and
   (ii) Checking the static pressure or fan RPM at least every 8 hours to verify the daily average static pressure at the inlet to the control device at an equal or greater vacuum than established during the initial or subsequent performance test or the daily average fan RPM at or above the minimum level established during the initial or subsequent performance test and recording the results of each check.

(e) Beginning on the first day compliance is required under §63.7283, you must demonstrate continuous compliance for each by-product coke oven battery subject to the opacity limit for stacks in §63.7296(a) by meeting the requirements in paragraphs (e)(1) and (2) of this section:

(1) Maintaining the daily average opacity at or below 15 percent for a battery on a normal coking cycle or 20 percent for a battery on batterywide extended coking; and

(2) Operating and maintaining a COMS and collecting and reducing the COMS data according to §63.7331(j).

(f) Beginning on the first day compliance is required under §63.7283, you must demonstrate continuous compliance with the TDS limit for quenching
§ 63.7334 How do I demonstrate continuous compliance with the work practice standards that apply to me?

(a) For each by-product coke oven battery with vertical flues subject to the work practice standards for fugitive pushing emissions in § 63.7291(a), you must demonstrate continuous compliance according to the requirements of paragraphs (a)(1) through (8) of this section:

1. Observe and record the opacity of fugitive emissions for four consecutive pushes per operating day, except you may make fewer or non-consecutive observations as permitted by § 63.7291(a)(3). Maintain records of the pushing schedule for each oven and records indicating the legitimate operational reason for any change in the pushing schedule according to § 63.7291(a)(4).

2. Record pushing opacity observations at 15-second intervals as required in section 2.4 of Method 9 (appendix A to 40 CFR part 60). The requirement in section 2.4 of Method 9 for a minimum of 24 observations does not apply, and the data reduction requirements in section 2.5 of Method 9 do not apply. The requirement in § 63.6(h)(5)(ii)(B) for obtaining at least 3 hours of observations (thirty 6-minute averages) to demonstrate initial compliance does not apply.

3. For each multicyclone applied to pushing emissions and subject to the operating limit in § 63.7290(b)(4), you must demonstrate compliance by meeting the requirements in paragraphs (h)(1) through (3) of this section:

1. Maintaining the daily average pressure drop at a level at or below the level established during the initial or subsequent performance test.

2. Operating and maintaining each CPMS according to § 63.7331(k) and recording all information needed to document conformance with these requirements.

3. Collecting and reducing monitoring data for pressure drop according to § 63.7331(e)(1) through (3).
(6) Begin observations for a push at the first detectable movement of the coke mass. End observations of a push when the quench car enters the quench tower.

(i) For a battery without a cokeside shed, observe fugitive pushing emissions from a position at least 10 meters from the quench car that provides an unobstructed view and avoids interferences from the topside of the battery. This may require the observer to be positioned at an angle to the quench car rather than perpendicular to it. Typical interferences to avoid include emissions from open standpipes and charging. Observe the opacity of emissions above the battery top with the sky as the background where possible. Record the oven number of any push not observed because of obstructions or interferences.

(ii) For a battery with a cokeside shed, the observer must be in a position that provides an unobstructed view and avoids interferences from the topside of the battery. Typical interferences to avoid include emissions from open standpipes and charging. Observations must include any fugitive emissions that escape from the top of the shed, from the ends of the shed, or from the area where the shed is joined to the battery. If the observer does not have a clear view to identify when a push starts or ends, a second person can be positioned to signal the start or end of the push and notify the observer when to start or end the observations. Radio communications with other plant personnel (e.g., pushing ram operator or quench car operator) may also serve to notify the observer of the start or end of a push. Record the oven number of any push not observed because of obstructions or interferences.

(iii) You may reposition after the push to observe emissions during travel if necessary.

(7) If it is infeasible to implement the procedures in paragraphs (a)(1) through (6) of this section, identify the oven and battery numbers, and describe the alternative procedure. An alternative procedure must identify whether the coke in that oven is not completely coked, either before, during, or after an oven is pushed.

(8) For each oven observed that exceeds an opacity of 30 percent for any short battery or 35 percent for any tall battery, you must take corrective action and/or increase the coking time in accordance with §63.7291(a). Maintain records documenting conformance with the requirements in §63.7291(a).

(b) For each by-product coke oven battery with horizontal flues subject to the work practice standards for fugitive pushing emissions in §63.7292(a), you must demonstrate continuous compliance by having met the requirements of paragraphs (b)(1) through (3) of this section:

(1) Measuring and recording the temperature of all flues on two ovens per day within 2 hours before the oven's scheduled pushing time and ensuring that the temperature of each oven is measured and recorded at least once every month;

(2) Recording the time each oven is charged and pushed and calculating and recording the net coking time for each oven; and

(3) Increasing the coking time for each oven that falls below the minimum flue temperature trigger established for that oven’s coking time in the written plan required in §63.7292(a)(1), assigning the oven to the oven-directed program, and recording all relevant information according to the requirements in §63.7292(a)(4) including, but not limited to, daily pushing schedules, diagnostic procedures, corrective actions, and oven repairs.

(c) For each non-recovery coke oven battery subject to the work practice standards in §63.7293(a), you must demonstrate continuous compliance by maintaining records that document each visual inspection of an oven prior to pushing and that the oven was not pushed unless there was no smoke in the open space above the coke bed and there was an unobstructed view of the door on the opposite side of the oven.

(d) For each by-product coke oven battery subject to the work practice
standard for soaking in §63.7294(a), you must demonstrate continuous compliance by maintaining records that document conformance with requirements in §63.7294(a)(1) through (5).

(e) For each coke oven battery subject to the work practice standard for quenching in §63.7295(b), you must demonstrate continuous compliance according to the requirements of paragraphs (e)(1) through (3) of this section:

1. Maintaining baffles in each quench tower such that no more than 5 percent of the cross-sectional area of the tower is uncovered or open to the sky as required in §63.7295(b)(1);
2. Maintaining records that document conformance with the washing, inspection, and repair requirements in §63.7295(b)(2), including records of the ambient temperature on any day that the baffles were not washed; and
3. Maintaining records of the source of makeup water to document conformance with the requirement for acceptable makeup water in §63.7295(a)(2).

§63.7335 How do I demonstrate continuous compliance with the operation and maintenance requirements that apply to me?

(a) For each by-product coke oven battery, you must demonstrate continuous compliance with the operation and maintenance requirements in §63.7300(b) by adhering at all times to the plan requirements and recording all information needed to document conformance.

(b) For each coke oven battery with a capture system or control device applied to pushing emissions, you must demonstrate continuous compliance with the operation and maintenance requirements in §63.7300(c) by meeting the requirements of paragraphs (b)(1) through (3) of this section:

1. Making monthly inspections of capture systems according to §63.7300(c)(1) and recording all information needed to document conformance with these requirements;
2. Performing preventative maintenance for each control device according to §63.7300(c)(2) and recording all information needed to document conformance with these requirements; and
3. Initiating and completing corrective action for a bag leak detection system alarm according to §63.7300(c)(3) and recording all information needed to document conformance with these requirements. This includes records of the times the bag leak detection system alarm sounds, and for each valid alarm, the time you initiated corrective action, the corrective action(s) taken, and the date on which corrective action is completed.

(c) To demonstrate continuous compliance with the operation and maintenance requirements for a baghouse applied to pushing emissions from a coke oven battery in §63.7331(a), you must inspect and maintain each baghouse according to the requirements in §63.7331(a)(1) through (8) and record all information needed to document conformance with these requirements. If you increase or decrease the sensitivity of the bag leak detection system beyond the limits specified in §63.7331(a)(6), you must include a copy of the required written certification by a responsible official in the next semiannual compliance report.

(d) You must maintain a current copy of the operation and maintenance plans required in §63.7300(b) and (c) on-site and available for inspection upon request. You must keep the plans for the life of the affected source or until the affected source is no longer subject to the requirements of this subpart.

§63.7336 What other requirements must I meet to demonstrate continuous compliance?

(a) Deviations. You must report each instance in which you did not meet each emission limitation in this subpart that applies to you. This includes periods of startup, shutdown, and malfunction. You must also report each instance in which you did not meet each work practice standard or operation and maintenance requirement in this subpart that applies to you. These instances are deviations from the emission limitations (including operating limits), work practice standards, and operation and maintenance requirements in this subpart. These deviations must be reported according to the requirements in §63.7341.

(b) Startup, shutdowns, and malfunctions. (1) Consistent with §§63.6(e) and 63.7(e)(1), deviations that occur during...
Environmental Protection Agency

§ 63.7341

a period of startup, shutdown, or malfunction are not violations if you demonstrate to the Administrator’s satisfaction that you were operating in accordance with § 63.6(e)(1).

(2) The Administrator will determine whether deviations that occur during a period of startup, shutdown, or malfunction are violations, according to the provisions in § 63.6(e).


§ 63.7340 What notifications must I submit and when?

(a) You must submit all of the notifications in §§ 63.6(h)(4) and (5), 63.7(b) and (c), 63.8(e) and (f)(4), and 63.9(b) through (h) that apply to you by the specified dates.

(b) As specified in § 63.9(b)(2), if you startup your affected source before April 14, 2003, you must submit your initial notification no later than August 12, 2003.

(c) As specified in § 63.9(b)(3), if you startup your new affected source on or after April 14, 2003, you must submit your initial notification no later than 120 calendar days after you become subject to this subpart.

(d) If you are required to conduct a performance test, you must submit a notification of intent to conduct a performance test at least 60 calendar days before the performance test is scheduled to begin as required in § 63.7(b)(1).

(e) If you are required to conduct a performance test, opacity observation, or other initial compliance demonstration, you must submit a notification of compliance status according to § 63.9(b)(2)(i).

(f) For each by-product coke oven battery with horizontal flues, you must notify the Administrator (or delegated authority) of the date on which the study of flue temperatures required by § 63.7292(a)(3) will be initiated. You must submit this notification no later than 7 days prior to the date you initiate the study.

§ 63.7341 What reports must I submit and when?

(a) Compliance report due dates. Unless the Administrator has approved a different schedule, you must submit quarterly compliance reports for battery stacks and semiannual compliance reports for all other affected sources to your permitting authority according to the requirements in paragraphs (a)(1) through (4) of this section.

(1) The first quarterly compliance report for battery stacks must cover the period beginning on the compliance date that is specified for your affected source in § 63.7283 and ending on June 30 or December 31, whichever date comes first after the compliance date that is specified for your affected source. Each subsequent compliance report must cover the next calendar quarter.

(2) The first semiannual compliance report must cover the period beginning on the compliance date that is specified for your affected source in § 63.7283 and ending on June 30 or December 31, whichever date comes first after the compliance date that is specified for your affected source. 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.

(3) All quarterly compliance reports for battery stacks must be postmarked or delivered no later than one calendar month following the end of the quarterly reporting period. All semiannual compliance reports 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.

(4) For each affected source that is subject to permitting regulations pursuant to 40 CFR part 70 or 40 CFR part 71, and if the permitting authority has
§ 63.7341 Quarterly and semiannual compliance reports—battery stacks

(a) Semiannual compliance report contents. Each semiannual report must provide information on compliance with the emission limitations for battery stacks in §63.7296. The reports must include the information in paragraphs (a)(1) through (3) of this section.

(b) Quarterly compliance report contents. Each quarterly report must provide information on compliance with the emission limitations for battery stacks in §63.7296. The reports must include the information in paragraphs (c)(1) through (8) of this section.

(c) Semiannual compliance report contents. Each compliance report must provide information on compliance with the emission limitations, work practice standards, and operation and maintenance requirements for all affected sources except battery stacks. The reports must include the information in paragraphs (c)(1) through (8) of this section.

(1) Company name and address.

(2) Statement by a responsible official, with the official’s name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report.

(3) Date of report and beginning and ending dates of the reporting period.

(4) If you had a startup, shutdown, or malfunction during the reporting period and you took actions consistent with your startup, shutdown, and malfunction plan, the compliance report must include the information in §63.10(d)(5)(i).

(5) If there were no deviations from the continuous compliance requirements in §63.7333(e) for battery stacks, a statement that there were no deviations from the emission limitations during the reporting period. If there were no deviations from the continuous compliance requirements in §§63.7333 through 63.7335 that apply to you (for all affected sources other than battery stacks), a statement that there were no deviations from the emission limitations, work practice standards, or operation and maintenance requirements during the reporting period.

(6) If there were no periods during which a continuous monitoring system (including COMS, continuous emission monitoring system (CEMS), or CPMS) was out-of-control as specified in §63.8(c)(7), a statement that there were no periods during which a continuous monitoring system was out-of-control during the reporting period.

(7) For each deviation from an emission limitation in this subpart (including quench water limits) and for each deviation from the requirements for work practice standards in this subpart that occurs at an affected source where you are not using a continuous monitoring system (including a COMS, CEMS, or CPMS) to comply with the emission limitations in this subpart, the compliance report must contain the information in paragraphs (c)(4) and (7)(i) and (ii) of this section. This includes periods of startup, shutdown, and malfunction.

(i) The total operating time of each affected source during the reporting period.

(ii) Information on the number, duration, and cause of deviations (including unknown cause, if applicable) as applicable and the corrective action taken.

(8) For each deviation from an emission limitation occurring at an affected source where you are using a continuous monitoring system (including COMS, CEMS, or CPMS) to comply with the emission limitation in this subpart, you must include the information in paragraphs (c)(4) and (8)(i) through (xii) of this section. This includes periods of startup, shutdown, and malfunction.

(i) The date and time that each malfunction started and stopped.

(ii) The date and time that each continuous monitoring system (including COMS, CEMS, or CPMS) was inoperative, except for zero (low-level) and high-level checks.

(iii) The date, time, and duration that each continuous monitoring system was out-of-control, including the information in §63.8(c)(8).

(iv) The date and time that each deviation started and stopped, and whether each deviation occurred during a period of startup, shutdown, or malfunction or during another period.
(v) 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.

(vi) A breakdown of the total duration of the deviations during the reporting period into those that are due to startup, shutdown, control equipment problems, process problems, other known causes, and other unknown causes.

(vii) A summary of the total duration of continuous monitoring system downtime during the reporting period and the total duration as a percent of the total source operating time during that reporting period.

(viii) An identification of each HAP that was monitored at the affected source.

(ix) A brief description of the process units.

(x) A brief description of the continuous monitoring system.

(xi) The date of the latest continuous monitoring system certification or audit.

(xii) A description of any changes in continuous monitoring systems, processes, or controls since the last reporting period.

(d) Immediate startup, shutdown, and malfunction report. If you had a startup, shutdown, or malfunction during the semiannual reporting period that was not consistent with your startup, shutdown, and malfunction plan, you must submit an immediate startup, shutdown, and malfunction report according to the requirements in §63.10(b)(5)(ii).

(e) Part 70 monitoring report. If you have obtained a title V operating permit for an affected source pursuant to 40 CFR part 70 or 40 CFR part 71, you 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 you submit a compliance report for an affected source 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 the required information concerning deviations from any emission limitation or work practice standard in this subpart, submission of the compliance report satisfies any obligation to report the same deviations in the semiannual monitoring report. However, submission of a compliance report does not otherwise affect any obligation you may have to report deviations from permit requirements to your permitting authority.

§63.7342 What records must I keep?

(a) You must keep the records specified in paragraphs (a)(1) through (3) 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 requirements in §63.10(b)(2)(xiv).

(2) The records in §63.6(e)(3)(iii) through (v) related to startup, shutdown, and malfunction.

(3) Records of performance tests, performance evaluations, and opacity observations as required in §63.10(b)(2)(vii).

(b) For each COMS or CEMS, you must keep the records specified in paragraphs (b)(1) through (4) of this section.

(1) Records described in §63.10(b)(2)(vi) through (xii).

(2) Monitoring data for COMS during a performance evaluation as required in §63.5(b)(7)(i) and (ii).

(3) Previous (that is, superceded) versions of the performance evaluation plan as required in §63.8(d)(3).

(4) Records of the date and time that each deviation started and stopped, and whether the deviation occurred during a period of startup, shutdown, or malfunction or during another period.

(c) You must keep the records in §63.8(h)(6) for visual observations.

(d) You must keep the records required in §§63.7333 through 63.7335 to show continuous compliance with each emission limitation, work practice standard, and operation and maintenance requirement that applies to you.

§63.7343 In what form and how long must I keep my records?

(a) You must keep your records 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 on site for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to §63.10(b)(1). You can keep the records offsite for the remaining 3 years.

OTHER REQUIREMENTS AND INFORMATION

§ 63.7350 What parts of the General Provisions apply to me?

Table 1 to this subpart shows which parts of the General Provisions in §§63.1 through 63.15 apply to you.

§ 63.7351 Who implements and enforces this subpart?

(a) This subpart can be implemented and enforced by us, the United States Environmental Protection Agency (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 has the authority to implement and enforce this subpart. You should contact your U.S. 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 subpart E of this part, 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 in paragraphs (c)(1) through (6) of this section will not be delegated to State, local, or tribal agencies.

(1) Approval of alternatives to work practice standards for fugitive pushing emissions in §63.7291(a) for a by-product coke oven battery, soaking for a by-product coke oven battery in §63.7294(a), and quenching for a coke oven battery in §63.7295(b) under §63.6(g).

(2) Approval of alternative opacity emission limitations for a by-product coke oven battery under §63.6(h)(9).

(3) Approval of major alternatives to test methods under §63.7(e)(2)(ii) and (f) and as defined in §63.90, except for alternative procedures in §63.734(a)(7).

(4) Approval of major alternatives to monitoring under §63.8(f) and as defined in §63.90.

(5) Approval of major alternatives to recordkeeping and reporting under §63.10(f) and as defined in §63.90.

(6) Approval of the work practice plan for by-product coke oven batteries with horizontal flues submitted under §63.7292(a)(1).

§ 63.7352 What definitions apply to this subpart?

Terms used in this subpart are defined in the Clean Air Act (CAA), in §63.2, and in this section as follows:

Acceptable makeup water means surface water from a river, lake, or stream; water meeting drinking water standards; storm water runoff and production area clean up water except for water from the by-product recovery plant area; process wastewater treated to meet effluent limitations guidelines 40 CFR part 420; water from any of these sources that has been used only for non-contact cooling or in water seals; or water from scrubbers used to control pushing emissions.

Backup quench station means a quenching device that is used for less than 5 percent of the quenches from any single coke oven battery in the 12-month period from July 1 to June 30.

Baffles means an apparatus comprised of obstructions for checking or deflecting the flow of gases. Baffles are installed in a quench tower to remove droplets of water and particles from the rising vapors by providing a point of impact. Baffles may be installed either inside or on top of quench towers and are typically constructed of treated wood, steel, or plastic.
Battery stack means the stack that is the point of discharge to the atmosphere of the combustion gases from a battery’s underfiring system.

Batterywide extended coking means increasing the average coking time for all ovens in the coke oven battery by 25 percent or more over the manufacturer’s specified design rate.

By-product coke oven battery means a group of ovens connected by common walls, where coal undergoes destructive distillation under positive pressure to produce coke and coke oven gas from which by-products are recovered.

By-product recovery plant area means that area of the coke plant where process units subject to subpart L in part 61 are located.

Coke oven battery means a group of ovens connected by common walls, where coal undergoes destructive distillation to produce coke. A coke oven battery includes by-product and non-recovery processes.

Coke plant means a facility that produces coke from coal in either a by-product coke oven battery or a non-recovery coke oven battery.

Cokeside shed means a structure used to capture pushing emissions that encloses the cokeside of the battery and ventilates the emissions to a control device.

Coking time means the time interval that starts when an oven is charged with coal and ends when the oven is pushed.

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 (including operating limits) 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 emission limitation or work practice standard in this subpart during startup, shutdown, or malfunction, regardless of whether or not such failure is permitted by this subpart.

Emission limitation means any emission limit, opacity limit, or operating limit.

Four consecutive pushes means four pushes observed successively.

Fugitive pushing emissions means emissions from pushing that are not collected by a capture system.

Horizontal flue means a type of coke oven heating system used on Semet-Solvay batteries where the heating flues run horizontally from one end of the oven to the other end, and the flues are not shared with adjacent ovens.

Hot water scrubber means a mobile scrubber used to control pushing emissions through the creation of an induced draft formed by the expansion of pressurized hot water through a nozzle.

Increased coking time means increasing the charge-to-push time for an individual oven.

Non-recovery coke oven battery means a group of ovens connected by common walls and operated as a unit, where coal undergoes destructive distillation under negative pressure to produce coke, and which is designed for the combustion of the coke oven gas from which by-products are not recovered.

Oven means a chamber in the coke oven battery in which coal undergoes destructive distillation to produce coke.

Pushing means the process of removing the coke from the oven. Pushing begins with the first detectable movement of the coke mass and ends when the quench car enters the quench tower.

Quenching means the wet process of cooling (wet quenching) the hot incandescent coke by direct contact with water that begins when the quench car enters the quench tower and ends when the quench car exits the quench tower.

Quench tower means the structure in which hot incandescent coke in the quench car is deluged or quenched with water.

Remove from service means that an oven is not charged with coal and is not used for coking. When removed from service, the oven may remain at the operating temperature or it may be cooled down for repairs.

Responsible official means responsible official as defined in §63.2.
**Short battery** means a by-product coke oven battery with ovens less than five meters in height.

**Soaking** means that period in the coking cycle that starts when an oven is dampered off the collecting main and vented to the atmosphere through an open standpipe prior to pushing and ends when the coke begins to be pushed from the oven.

**Soaking emissions** means the discharge from an open standpipe during soaking of visible emissions due to either incomplete coking or leakage into the standpipe from the collecting main.

**Standpipe** means an apparatus on the oven that provides a passage for gases from an oven to the atmosphere when the oven is dampered off the collecting main and the standpipe cap is opened. This includes mini-standpipes that are not connected to the collecting main.

**Tall battery** means a by-product coke oven battery with ovens five meters or more in height.

**Vertical flue** means a type of coke oven heating system in which the heating flues run vertically from the bottom to the top of the oven, and flues are shared between adjacent ovens.

**Work practice standard** means any design, equipment, work practice, or operational standard, or combination thereof, that is promulgated pursuant to section 112(h) of the CAA.

### Table 1 to Subpart CCCCC of Part 63—Applicability of General Provisions to Subpart CCCCC

As required in §63.7350, you must comply with each applicable requirement of the NESHAP General Provisions (40 CFR part 63, subpart A) as shown in the following table:

<table>
<thead>
<tr>
<th>Citation</th>
<th>Subject</th>
<th>Applies to Subpart CCCCC?</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>§63.1</td>
<td>Applicability</td>
<td>Yes.</td>
<td></td>
</tr>
<tr>
<td>§63.2</td>
<td>Definitions</td>
<td>Yes.</td>
<td></td>
</tr>
<tr>
<td>§63.3</td>
<td>Units and Abbreviations</td>
<td>Yes.</td>
<td></td>
</tr>
<tr>
<td>§63.4</td>
<td>Prohibited Activities</td>
<td>Yes.</td>
<td></td>
</tr>
<tr>
<td>§63.5</td>
<td>Construction/Reconstruction</td>
<td>Yes.</td>
<td></td>
</tr>
<tr>
<td>§63.6(a), (b), (c), (d), (e), (f), (g), (h)(2)–(8)</td>
<td>Compliance with Standards and Maintenance Requirements.</td>
<td>Yes.</td>
<td></td>
</tr>
<tr>
<td>§63.6(h)(9)</td>
<td>Adjustment to anOpacity Emission Standard.</td>
<td>Yes.</td>
<td></td>
</tr>
<tr>
<td>§63.7(a)(3), (b), (c)–(h)</td>
<td>Performance Testing Requirements</td>
<td>Yes.</td>
<td>Subpart CCCCC specifies applicability and dates.</td>
</tr>
<tr>
<td>§63.7(a)(1)–(2)</td>
<td>Applicability and Performance Test Dates.</td>
<td>No.</td>
<td></td>
</tr>
<tr>
<td>§63.8(a)(1)–(3), (b), (c)(1)–(3), (c)(4)(i)–(f), (c)(5)–(8), (d), (e), (f)(1)–(5), (g)(1)–(4).</td>
<td>Monitoring Requirements</td>
<td>Yes.</td>
<td>CMS requirements in §63.8(c)(4)(i)–(ii), (c)(5), and (c)(6) apply only to COMS for battery stacks.</td>
</tr>
<tr>
<td>§63.8(a)(4)</td>
<td>Additional Monitoring Requirements for Control Devices in §63.11.</td>
<td>No.</td>
<td>Flares are not a control device for Subpart CCCCC affected sources.</td>
</tr>
<tr>
<td>§63.8(c)(4)</td>
<td>Continuous Monitoring System (CMS) Requirements.</td>
<td>No.</td>
<td>Subpart CCCCC specifies requirements for operation of CMS.</td>
</tr>
<tr>
<td>§63.8(e)(4)–(5)</td>
<td>Performance Evaluations</td>
<td>Yes.</td>
<td>Except COMS performance evaluation must be conducted before the compliance date.</td>
</tr>
<tr>
<td>§63.8(l)(6)</td>
<td>RATA Alternative</td>
<td>No.</td>
<td>Subpart CCCCC does not require CEMS.</td>
</tr>
<tr>
<td>§63.8(g)(5)</td>
<td>Data Reduction</td>
<td>No.</td>
<td>Subpart CCCCC specifies data that can't be used in computing averages for COMS.</td>
</tr>
<tr>
<td>§63.9</td>
<td>Notification Requirements</td>
<td>Yes.</td>
<td>Additional notifications for CMS in §63.9(g) apply only to COMS for battery stacks.</td>
</tr>
<tr>
<td>§63.10(a), (b)(1)–(2)</td>
<td>Recordkeeping and Reporting Requirements.</td>
<td>Yes.</td>
<td>Additional records for CMS in §63.10(c)(1)–(6), (9)–(15), and reports in §63.10(b)(1)–(2) apply only to COMS for battery stacks.</td>
</tr>
<tr>
<td>§63.10(b)(2) (a)(1)–(6)</td>
<td>CMS Records for RATA Alternative</td>
<td>No.</td>
<td>Subpart CCCCC doesn't require CEMS.</td>
</tr>
</tbody>
</table>
Subpart DDDDD—National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters

Source: 76 FR 15664, Mar. 21, 2011, unless otherwise noted.

WHAT THIS SUBPART COVERS

§ 63.7480 What is the purpose of this subpart?

This subpart establishes national emission limitations and work practice standards for hazardous air pollutants (HAP) emitted from industrial, commercial, and institutional boilers and process heaters located at major sources of HAP. This subpart also establishes requirements to demonstrate initial and continuous compliance with the emission limitations and work practice standards.

§ 63.7485 Am I subject to this subpart?

You are subject to this subpart if you own or operate an industrial, commercial, or institutional boiler or process heater as defined in §63.7575 that is located at, or is part of, a major source of HAP, except as specified in §63.7491. For purposes of this subpart, a major source of HAP is as defined in §63.2, except that for oil and natural gas production facilities, a major source of HAP is as defined in §63.7575.

[78 FR 7162, Jan. 31, 2013]

§ 63.7490 What is the affected source of this subpart?

(a) This subpart applies to new, reconstructed, and existing affected sources as described in paragraphs (a)(1) and (2) of this section.

(1) The affected source of this subpart is the collection at a major source of all existing industrial, commercial, and institutional boilers and process heaters within a subcategory as defined in §63.7575.

(2) The affected source of this subpart is each new or reconstructed industrial, commercial, or institutional boiler or process heater, as defined in §63.7575, located at a major source.

(b) A boiler or process heater is new if you commence construction of the boiler or process heater after June 4, 2010, and you meet the applicability criteria at the time you commence construction.

(c) A boiler or process heater is reconstructed if you meet the reconstruction criteria as defined in §63.2, you commence reconstruction after June 4, 2010, and you meet the applicability criteria at the time you commence reconstruction.

(d) A boiler or process heater is existing if it is not new or reconstructed.

(e) An existing electric utility steam generating unit (EGU) that meets the applicability requirements of this subpart after the effective date of this final rule due to a change (e.g., fuel switch) is considered to be an existing source under this subpart.

[76 FR 15664, Mar. 21, 2011, as amended at 78 FR 7162, Jan. 31, 2013]

§ 63.7491 Are any boilers or process heaters not subject to this subpart?

The types of boilers and process heaters listed in paragraphs (a) through (n) of this section are not subject to this subpart.

(a) An electric utility steam generating unit (EGU) covered by subpart

"Environmental Protection Agency

<table>
<thead>
<tr>
<th>Citation</th>
<th>Subject</th>
<th>Applies to Subpart CCCCC?</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>§63.10(c)(7)–(8)</td>
<td>Records of Excess Emissions and Parameter Monitoring Exceedances for CMS.</td>
<td>No</td>
<td>Subpart CCCCC specifies record requirements.</td>
</tr>
<tr>
<td>§63.10(e)(3)</td>
<td>Excess Emission Reports</td>
<td>No</td>
<td>Subpart CCCCC specifies reporting requirements.</td>
</tr>
<tr>
<td>§63.11</td>
<td>Control Device Requirements</td>
<td>No</td>
<td>Subpart CCCCC does not require flares.</td>
</tr>
<tr>
<td>§63.12</td>
<td>State Authority and Delegations</td>
<td>Yes.</td>
<td></td>
</tr>
<tr>
<td>§§63.13–63.15</td>
<td>Addresses, Incorporation by Reference, Availability of Information</td>
<td>Yes.</td>
<td></td>
</tr>
</tbody>
</table>
§ 63.7495 When do I have to comply with this subpart?

(a) If you have a new or reconstructed boiler or process heater, you must comply with this subpart by April 1, 2013, or upon startup of your boiler or process heater, whichever is later.

(b) If you have an existing boiler or process heater, you must comply with this subpart no later than January 31, 2016, except as provided in §63.6(i).

(c) If you have an area source that increases its emissions or its potential to emit such that it becomes a major source of HAP, paragraphs (c)(1) and (2) of this section apply to you.

(1) Any new or reconstructed boiler or process heater at the existing source must be in compliance with this subpart upon startup.

(2) Any existing boiler or process heater at the existing source must be in compliance with this subpart within 3 years after the source becomes a major source.

(d) You must meet the notification requirements in §63.7545 according to the schedule in §63.7545 and in subpart A of this part. Some of the notifications must be submitted before you are required to comply with the emission limits and work practice standards in this subpart.

(e) If you own or operate an industrial, commercial, or institutional boiler or process heater and would be subject to this subpart except for the exemption in §63.7491(l) for commercial and industrial solid waste incineration units covered by part 60, subpart CCCC or subpart DDDD, and you cease combusting solid waste, you must be in compliance with this subpart and are no longer subject to part 60, subparts CCCC or DDDD beginning on the effective date of the switch as identified under the provisions of §60.2145(a)(2) and (3) or §60.2710(a)(2) and (3).

(f) If you own or operate an existing EGU that becomes subject to this subpart after January 31, 2016, you must be in compliance with the applicable existing source provisions of this subpart on the effective date such unit becomes subject to this subpart.

(g) If you own or operate an existing industrial, commercial, or institutional boiler or process heater and
would be subject to this subpart except for an exemption in §63.7491(i) that becomes subject to this subpart after January 31, 2013, you must be in compliance with the applicable existing source provisions of this subpart within 3 years after such unit becomes subject to this subpart.

(h) If you own or operate an existing industrial, commercial, or institutional boiler or process heater and have switched fuels or made a physical change to the boiler or process heater that resulted in the applicability of a different subcategory after the compliance date of this subpart, you must be in compliance with the applicable existing source provisions of this subpart on the effective date of the fuel switch or physical change.

(i) If you own or operate a new industrial, commercial, or institutional boiler or process heater and have switched fuels or made a physical change to the boiler or process heater that resulted in the applicability of a different subcategory, you must be in compliance with the applicable new source provisions of this subpart on the effective date of the fuel switch or physical change.

§ 63.7499 What are the subcategories of boilers and process heaters?

The subcategories of boilers and process heaters, as defined in §63.7575 are:

(a) Pulverized coal/solid fossil fuel units.

(b) Stokers designed to burn coal/solid fossil fuel.

(c) Fluidized bed units designed to burn coal/solid fossil fuel.

(d) Stokers/sloped grate/other units designed to burn kiln dried biomass/bio-based solid.

(e) Fluidized bed units designed to burn biomass/bio-based solid.

(f) Suspension burners designed to burn biomass/bio-based solid.

(g) Fuel cells designed to burn biomass/bio-based solid.

(h) Hybrid suspension/grate burners designed to burn wet biomass/bio-based solid.

(i) Stokers/sloped grate/other units designed to burn wet biomass/bio-based solid.

(j) Dutch oven/pile burners designed to burn biomass/bio-based solid.

(k) Units designed to burn liquid fuel that are non-continental units.

(l) Units designed to burn gas 1 fuels.

(m) Units designed to burn gas 2 (other) gases.

(n) Metal process furnaces.

(o) Limited-use boilers and process heaters.

(p) Units designed to burn solid fuel.

(q) Units designed to burn liquid fuel.

(r) Units designed to burn coal/solid fossil fuel.

(s) Fluidized bed units with an integrated fluidized bed heat exchanger designed to burn coal/solid fossil fuel.

(t) Units designed to burn heavy liquid fuel.

(u) Units designed to burn light liquid fuel.

(76 FR 15664, Mar. 21, 2011, as amended at 78 FR 7163, Jan. 31, 2013)

§ 63.7500 What emission limitations, work practice standards, and operating limits must I meet?

(a) You must meet the requirements in paragraphs (a)(1) through (3) of this section, except as provided in paragraphs (b), through (e) of this section. You must meet these requirements at all times the affected unit is operating; except as provided in paragraph (f) of this section.

(1) You must meet each emission limit and work practice standard in Tables 1 through 3, and 11 through 13 to this subpart that applies to your boiler or process heater, for each boiler or process heater at your source, except as provided under §63.7522. The output-based emission limits, in units of pounds per million Btu of steam output, in Tables 1 or 2 to this subpart are an alternative applicable only to boilers and process heaters that generate either steam, cogenerate steam with electricity, or both. The output-based emission limits, in units of pounds per megawatt-hour, in Tables 1 or 2 to this subpart are an alternative applicable
only to boilers that generate only electricity. Boilers that perform multiple functions (cogeneration and electricity generation) or supply steam to common headers would calculate a total steam energy output using equation 21 of §63.7575 to demonstrate compliance with the output-based emission limits, in units of pounds per million Btu of steam output, in Tables 1 or 2 to this subpart. If you operate a new boiler or process heater, you can choose to comply with alternative limits as discussed in paragraphs (a)(1)(i) through (iii) of this section, but on or after January 31, 2016, you must comply with the emission limits in Table 1 to this subpart.

(i) If your boiler or process heater commenced construction or reconstruction after June 4, 2010 and before May 20, 2011, you may comply with the emission limits in Table 1 or 11 to this subpart until January 31, 2016.

(ii) If your boiler or process heater commenced construction or reconstruction on or after May 20, 2011 and before December 23, 2011, you may comply with the emission limits in Table 1 or 12 to this subpart until January 31, 2016.

(iii) If your boiler or process heater commenced construction or reconstruction on or after December 23, 2011 and before April 1, 2013, you may comply with the emission limits in Table 1 or 13 to this subpart until January 31, 2016.

(2) You must meet each operating limit in Table 4 to this subpart that applies to your boiler or process heater. If you use a control device or combination of control devices not covered in Table 4 to this subpart, or you wish to establish and monitor an alternative operating limit or an alternative monitoring parameter, you must apply to the EPA Administrator for approval of alternative monitoring under §63.8(f).

(3) At all times, you must operate and maintain any affected source (as defined in §63.7490), including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator that may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.

(b) As provided in §63.6(g), EPA may approve use of an alternative to the work practice standards in this section.

(c) Limited-use boilers and process heaters must complete a tune-up every 5 years as specified in §63.7540. They are not subject to the emission limits in Tables 1 and 2 or 11 through 13 to this subpart, the annual tune-up, or the energy assessment requirements in Table 3 to this subpart, or the operating limits in Table 4 to this subpart.

(d) Boilers and process heaters with a heat input capacity of less than or equal to 5 million Btu per hour in the units designed to burn gas 2 (other) fuels subcategory or units designed to burn light liquid fuels subcategory must complete a tune-up every 5 years as specified in §63.7540.

(e) Boilers and process heaters in the units designed to burn gas 1 fuels subcategory with a heat input capacity of less than or equal to 5 million Btu per hour must complete a tune-up every 2 years as specified in §63.7540. Boilers and process heaters in the units designed to burn gas 1 fuels subcategory with a heat input capacity greater than 5 million Btu per hour and less than 10 million Btu per hour must complete a tune-up every 2 years as specified in §63.7540. Boilers and process heaters in the units designed to burn gas 1 fuels subcategory are not subject to the emission limits in Tables 1 and 2 or 11 through 13 to this subpart, or the operating limits in Table 4 to this subpart.

(f) These standards apply at all times the affected unit is operating, except during periods of startup and shutdown during which time you must comply only with items 5 and 6 of Table 3 to this subpart.

§ 63.7501 [Reserved]

GENERAL COMPLIANCE REQUIREMENTS

§ 63.7505 What are my general requirements for complying with this subpart?

(a) You must be in compliance with the emission limits, work practice standards, and operating limits in this subpart. These emission and operating limits apply to you at all times the affected unit is operating except for the periods noted in §63.7500(f).

(b) [Reserved]

(c) You must demonstrate compliance with all applicable emission limits using performance stack testing, fuel analysis, or continuous monitoring systems (CMS), including a continuous emission monitoring system (CEMS), or particulate matter continuous parameter monitoring system (PM CPMS), where applicable. You may demonstrate compliance with the applicable emission limit for hydrogen chloride (HCl), mercury, or total selected metals (TSM) using fuel analysis if the emission rate calculated according to §63.7530(c) is less than the applicable emission limit. (For gaseous fuels, you may not use fuel analyses to comply with the TSM alternative standard or the HCl standard.) Otherwise, you must demonstrate compliance for HCl, mercury, or TSM using performance stack testing, if subject to an applicable emission limit listed in Tables 1, 2, or 11 through 13 to this subpart.

(d) If you demonstrate compliance with any applicable emission limit through performance testing and subsequent compliance with operating limits through the use of CPMS, or with a CEMS or COMS, you must develop a site-specific monitoring plan according to the requirements in paragraphs (d)(1) through (4) of this section for the use of any CEMS, COMS, or CPMS. This requirement also applies to you if you petition the EPA Administrator for approval upon request, a site-specific monitoring plan that addresses design, data collection, and the quality assurance and quality control elements outlined in §63.8(d) and the elements described in paragraphs (d)(1)(i) through (iii) of this section. You must submit this site-specific monitoring plan, if requested, at least 60 days before your initial performance evaluation of your CMS. This requirement to develop and submit a site specific monitoring plan does not apply to affected sources with existing CEMS or COMS operated according to the performance specifications under appendix B to part 60 of this chapter and that meet the requirements of §63.7525. Using the process described in §63.8(d)(4), you may request approval of alternative monitoring system quality assurance and quality control procedures in place of those specified in this paragraph and, if approved, include the alternatives in your site-specific monitoring plan.

(i) Installation of the CMS sampling probe or other interface at a measurement location relative to each affected process unit such that the measurement is representative of control of the exhaust emissions (e.g., on or downstream of the last control device);

(ii) Performance and equipment specifications for the sample interface, the pollutant concentration or parametric signal analyzer, and the data collection and reduction systems; and

(iii) Performance evaluation procedures and acceptance criteria (e.g., calibrations, accuracy audits, analytical drift).

(2) In your site-specific monitoring plan, you must also address paragraphs (d)(2)(i) through (iii) of this section.

(i) Ongoing operation and maintenance procedures in accordance with the general requirements of §63.8(c)(1)(ii), (c)(3), and (c)(4)(ii);

(ii) Ongoing data quality assurance procedures in accordance with the general requirements of §63.8(d); and

(iii) Ongoing recordkeeping and reporting procedures in accordance with the general requirements of §63.10(c) (as applicable in Table 10 to this subpart), (e)(1), and (e)(2)(i).

(3) You must conduct a performance evaluation of each CMS in accordance with your site-specific monitoring plan.

§ 63.7506 [Reserved]
§ 63.7510 What are my initial compliance requirements and by what date must I conduct them?

(a) For each boiler or process heater that is required or that you elect to demonstrate compliance with any of the applicable emission limits in Tables 1 or 2 or 11 through 13 of this subpart through performance (stack) testing, your initial compliance requirements include all the following:

(1) Conduct performance tests according to §63.7520 and Table 5 to this subpart.

(2) Conduct a fuel analysis for each type of fuel burned in your boiler or process heater according to §63.7521 and Table 6 to this subpart, except as specified in paragraphs (a)(2)(i) through (ii) of this section.

(i) For each boiler or process heater that burns a single type of fuel, you are not required to conduct a fuel analysis for each type of fuel burned in your boiler or process heater according to §63.7521 and Table 6 to this subpart, except as specified in paragraphs (a)(2)(i) through (ii) of this section.

(ii) When natural gas, refinery gas, or other gas 1 fuels are co-fired with other fuels, you are not required to conduct a fuel analysis of those Gas 1 fuels according to §63.7521 and Table 6 to this subpart. If gaseous fuels other than natural gas, refinery gas, or other gas 1 fuels are co-fired with other fuels and those non-Gas 1 gaseous fuels are subject to another subpart of this part, part 60, part 61, or part 65, you are not required to conduct a fuel analysis of those non-Gas 1 fuels according to §63.7521 and Table 6 to this subpart.

(iii) You are not required to conduct a chlorine fuel analysis for any gaseous fuels. You must conduct a fuel analysis for mercury on gaseous fuels unless the fuel is exempted in paragraphs (a)(2)(i) and (ii) of this section.

(b) For each boiler or process heater that you elect to demonstrate compliance with the applicable emission limits in Tables 1 or 2 or 11 through 13 of this subpart for HCl, mercury, or TSM through fuel analysis, your initial compliance requirement is to conduct a fuel analysis for each type of fuel burned in your boiler or process heater according to §63.7521 and Table 6 to this subpart and establish operating limits according to §63.7530 and Table 8 to this subpart. The fuels described in paragraph (a)(2)(i) and (ii) of this section are exempt from these fuel analysis and operating limit requirements. The fuels described in paragraph (a)(2)(ii) of this section are exempt from the chloride fuel analysis and operating limit requirements. Boilers and process heaters that use a CEMS for mercury or HCl are exempt from the performance testing and operating limit requirements specified in paragraph (a) of this section for the HAP for which CEMS are used.

(c) If your boiler or process heater is subject to a carbon monoxide (CO) limit, your initial compliance demonstration for CO is to conduct a performance test for CO according to Table 5 to this subpart or conduct a performance evaluation of your continuous CO monitor, if applicable, according to §63.7525(a). Boilers and process heaters that use a CO CEMS to comply with the applicable alternative CO
CEMS emission standard listed in Tables 1, 2, or 11 through 13 to this subpart, as specified in §63.7525(a), are exempt from the initial CO performance testing and oxygen concentration operating limit requirements specified in paragraph (a) of this section.

(d) If your boiler or process heater is subject to a PM limit, your initial compliance demonstration for PM is to conduct a performance test in accordance with §63.7520 and Table 5 to this subpart.

(e) For existing affected sources (as defined in §63.7490), you must complete the initial compliance demonstrations, as specified in paragraphs (a) through (d) of this section, no later than 180 days after the compliance date that is specified for your source in §63.7495 and according to the applicable provisions in §63.7(a)(2) as cited in Table 10 to this subpart, except as specified in paragraph (j) of this section. You must complete an initial tune-up by following the procedures described in §63.7540(a)(10)(i) through (vi) no later than the compliance date specified in §63.7495, except as specified in paragraph (j) of this section. You must complete the one-time energy assessment specified in Table 3 to this subpart no later than the compliance date specified in §63.7495.

(f) For new or reconstructed affected sources (as defined in §63.7490), you must demonstrate initial compliance with the applicable emission limit in Tables 11 through 13 to this subpart that is less stringent (that is, higher) than the applicable emission limit in Table 1 to this subpart, you must demonstrate compliance with the applicable emission limit in Table 1 no later than July 29, 2016.

(g) For new or reconstructed affected sources (as defined in §63.7490), you must demonstrate initial compliance with the applicable work practice standards in Table 3 to this subpart within the applicable annual, biennial, or 5-year schedule as specified in §63.7515(d) following the initial compliance date specified in §63.7495(a).

(h) For affected sources (as defined in §63.7490) that ceased burning solid waste consistent with §63.7495(e) and for which the initial compliance date has passed, you must demonstrate compliance within 60 days of the effective date of the waste-to-fuel switch. If you have not conducted your compliance demonstration for this subpart within the previous 12 months, you must complete all compliance demonstrations for this subpart before you commence or recommence combustion of solid waste.

(i) For an existing EGU that becomes subject after January 31, 2016, you must demonstrate compliance within 180 days after becoming an affected source.

(j) For existing affected sources (as defined in §63.7490) that have not operated between the effective date of the rule and the compliance date that is specified for your source in §63.7495, you must complete the initial compliance demonstration, if subject to the emission limits in Table 2 to this subpart, as specified in paragraphs (a) through (d) of this section, no later than 180 days after the re-start of the affected source and according to the applicable provisions in §63.7(a)(2) as cited in Table 10 to this subpart. You must complete an initial tune-up by following the procedures described in §63.7540(a)(10)(i) through (vi) no later than 30 days after the re-start of the affected source and, if applicable, complete the one-time energy assessment specified in Table 3 to this subpart, no later than the compliance date specified in §63.7495.

(k) For affected sources, as defined in §63.7490, that switch subcategories consistent with §63.7545(h) after the initial compliance date, you must demonstrate compliance within 60 days of the effective date of the switch, unless you had previously conducted your compliance demonstration for this subcategory within the previous 12 months.

§ 63.7515 When must I conduct subsequent performance tests, fuel analyses, or tune-ups?

(a) You must conduct all applicable performance tests according to §63.7520 on an annual basis, except as specified in paragraphs (b) through (e), (g), and (h) of this section. Annual performance tests must be completed no more than 13 months after the previous performance test, except as specified in paragraphs (b) through (e), (g), and (h) of this section.

(b) If your performance tests for a given pollutant for at least 2 consecutive years show that your emissions are at or below 75 percent of the emission limit (or, in limited instances as specified in Tables 1 and 2 or 11 through 13 to this subpart) for the pollutant, and if there are no changes in the operation of the individual boiler or process heater or air pollution control equipment that could increase emissions, you may choose to conduct performance tests for the pollutant every third year. Each such performance test must be conducted no more than 37 months after the previous performance test. If you elect to demonstrate compliance using emission averaging under §63.7522, you must continue to conduct performance tests annually. The requirement to test at maximum chloride input level is waived unless the stack test is conducted for HCl. The requirement to test at maximum mercury input level is waived unless the stack test is conducted for mercury. The requirement to test at maximum TSM input level is waived unless the stack test is conducted for TSM.

(c) If a performance test shows emissions exceeded the emission limit or 75 percent of the emission limit (as specified in Tables 1 and 2 or 11 through 13 to this subpart) for a pollutant, you must conduct annual performance tests for that pollutant until all performance tests over a consecutive 2-year period meet the required level (at or below 75 percent of the emission limit, as specified in Tables 1 and 2 or 11 through 13 to this subpart).

(d) If you are required to meet an applicable tune-up work practice standard, you must conduct an annual, biennial, or 5-year performance tune-up according to §63.7540(a)(10), (11), or (12), respectively. Each annual tune-up specified in §63.7540(a)(10) must be conducted no more than 13 months after the previous tune-up. Each biennial tune-up specified in §63.7540(a)(11) must be conducted no more than 25 months after the previous tune-up. Each 5-year tune-up specified in §63.7540(a)(12) must be conducted no more than 61 months after the previous tune-up. For a new or reconstructed affected source (as defined in §63.7490), the first annual, biennial, or 5-year tune-up must be no later than 13 months, 25 months, or 61 months, respectively, after April 1, 2013 or the initial startup of the new or reconstructed affected source, whichever is later.

(e) If you demonstrate compliance with the mercury, HCl, or TSM based on fuel analysis, you must conduct a monthly fuel analysis according to §63.7521 for each type of fuel burned that is subject to an emission limit in Tables 1, 2, or 11 through 13 to this subpart. You may comply with this monthly requirement by completing the fuel analysis any time within the calendar month as long as the analysis is separated from the previous analysis by at least 14 calendar days. If you burn a new type of fuel, you must conduct a fuel analysis before burning the new type of fuel in your boiler or process heater. You must still meet all applicable continuous compliance requirements in §63.7540. If each of 12 consecutive monthly fuel analyses demonstrates 75 percent or less of the compliance level, you may decrease the fuel analysis frequency to quarterly for that fuel. If any quarterly sample exceeds 75 percent of the compliance level or you begin burning a new type of fuel, you must conduct a fuel analysis before burning the new type of fuel. If sampling is conducted on one day per month, samples should be no less than 14 days apart, but if multiple samples are taken per month, the 14-day restriction does not apply.

(f) You must report the results of performance tests and the associated fuel analyses within 60 days after the completion of the performance tests. This report must also verify that the
operating limits for each boiler or process heater have not changed or provide documentation of revised operating limits established according to § 63.7530 and Table 7 to this subpart, as applicable. The reports for all subsequent performance tests must include all applicable information required in § 63.7550.

(g) For affected sources (as defined in § 63.7490) that have not operated since the previous compliance demonstration and more than one year has passed since the previous compliance demonstration, you must complete the subsequent compliance demonstration, if subject to the emission limits in Tables 1, 2, or 11 through 13 to this subpart, no later than 180 days after the re-start of the affected source and according to the applicable provisions in § 63.7(a)(2) as cited in Table 10 to this subpart. You must complete a subsequent tune-up by following the procedures described in § 63.7540(a)(10)(i) through (vi) and the schedule described in § 63.7540(a)(13) for units that are not operating at the time of their scheduled tune-up.

(h) If your affected boiler or process heater is in the unit designed to burn light liquid subcategory and you combust ultra-low sulfur liquid fuel, you do not need to conduct further performance tests (stack tests or fuel analyses) if the pollutants measured during the initial compliance performance tests meet the emission limits in Tables 1 or 2 as specified in § 63.7530 and Table 7 to this subpart, as applicable. The reports for all subsequent performance tests must include all applicable information required in § 63.7550.

(i) If you operate a CO CEMS that meets the Performance Specifications outlined in § 63.7525(a)(3) of this subpart to demonstrate compliance with the applicable alternative CO CEMS emission standard listed in Tables 1, 2, or 11 through 13 to this subpart, you are not required to conduct CO performance tests and are not subject to the oxygen concentration operating limit requirement specified in § 63.7510(a).
chapter to convert the measured particulate matter (PM) concentrations, the measured HCl concentrations, the measured mercury concentrations, and the measured TSM concentrations that result from the performance test to pounds per million Btu heat input emission rates.

(f) Except for a 30-day rolling average based on CEMS (or sorbent trap monitoring system) data, if measurement results for any pollutant are reported as below the method detection level (e.g., laboratory analytical results for one or more sample components are below the method defined analytical detection level), you must use the method detection level as the measured emissions level for that pollutant in calculating compliance. The measured result for a multiple component analysis (e.g., analytical values for multiple Method 29 fractions both for individual HAP metals and for total HAP metals) may include a combination of method detection level data and analytical data reported above the method detection level.

§ 63.7521 What fuel analyses, fuel specification, and procedures must I use?

(a) For solid and liquid fuels, you must conduct fuel analyses for chloride and mercury according to the procedures in paragraphs (b) through (e) of this section and Table 6 to this subpart, as applicable. For solid fuels and liquid fuels, you must also conduct fuel analyses for TSM if you are opting to comply with the TSM alternative standard. For gas 2 (other) fuels, you must conduct fuel analyses for mercury according to the procedures in paragraphs (b) through (e) of this section and Table 6 to this subpart, as applicable. For gaseous fuels, you may not use fuel analyses to comply with the TSM alternative standard or the HCl standard.

(b) You must develop a site-specific fuel monitoring plan according to the following procedures and requirements in paragraphs (b)(1) and (2) of this section, if you are required to conduct fuel analyses as specified in §63.7510.

(1) If you intend to use an alternative analytical method other than those required by Table 6 to this subpart, you must submit the fuel analysis plan to the Administrator for review and approval no later than 60 days before the date that you intend to conduct the initial compliance demonstration described in §63.7510.

(2) You must include the information contained in paragraphs (b)(2)(i) through (vi) of this section in your fuel analysis plan.

(i) The identification of all fuel types anticipated to be burned in each boiler or process heater.

(ii) For each anticipated fuel type, the notification of whether you or a fuel supplier will be conducting the fuel analysis.

(iii) For each anticipated fuel type, a detailed description of the sample location and specific procedures to be used for collecting and preparing the composite samples if your procedures are different from paragraph (c) or (d) of this section. Samples should be collected at a location that most accurately represents the fuel type, where possible, at a point prior to mixing with other dissimilar fuel types.

(iv) For each anticipated fuel type, the analytical methods from Table 6, with the expected minimum detection levels, to be used for the measurement of chlorine or mercury.

(v) If you request to use an alternative analytical method other than
those required by Table 6 to this subpart, you must also include a detailed description of the methods and procedures that you are proposing to use. Methods in Table 6 shall be used until the requested alternative is approved.

(vi) If you will be using fuel analysis from a fuel supplier in lieu of site-specific sampling and analysis, the fuel supplier must use the analytical methods required by Table 6 to this subpart.

(c) You must obtain composite fuel samples for each fuel type according to the procedures in paragraph (c)(1) or (2) of this section, or the methods listed in Table 6 to this subpart, or use an automated sampling mechanism that provides representative composite fuel samples for each fuel type that includes both coarse and fine material. At a minimum, for demonstrating initial compliance by fuel analysis, you must obtain three composite samples. For monthly fuel analyses, at a minimum, you must obtain a single composite sample. For fuel analyses as part of a performance stack test, as specified in §63.7510(a), you must obtain a composite fuel sample during each performance test run.

(1) If sampling from a belt (or screw) feeder, collect fuel samples according to paragraphs (c)(1)(i) and (ii) of this section.

(i) Stop the belt and withdraw a 6-inch wide sample from the full cross-section of the stopped belt to obtain a minimum two pounds of sample. You must collect all the material (fines and coarse) in the full cross-section. You must transfer the sample to a clean plastic bag.

(ii) Each composite sample will consist of a minimum of three samples collected at approximately equal one-hour intervals during the testing period for sampling during performance stack testing.

(2) If sampling from a fuel pile or truck, you must collect fuel samples according to paragraphs (c)(2)(i) through (iii) of this section.

(i) For each composite sample, you must select a minimum of five sampling locations uniformly spaced over the surface of the pile.

(ii) At each sampling site, you must dig into the pile to a uniform depth of approximately 18 inches. You must insert a clean shovel into the hole and withdraw a sample, making sure that large pieces do not fall off during sampling; use the same shovel to collect all samples.

(iii) You must transfer all samples to a clean plastic bag for further processing.

(d) You must prepare each composite sample according to the procedures in paragraphs (d)(1) through (7) of this section.

(1) You must thoroughly mix and pour the entire composite sample over a clean plastic sheet.

(2) You must break large sample pieces (e.g., larger than 3 inches) into smaller sizes.

(3) You must make a pie shape with the entire composite sample and subdivide it into four equal parts.

(4) You must separate one of the quarter samples as the first subset.

(5) If this subset is too large for grinding, you must repeat the procedure in paragraph (d)(3) of this section with the quarter sample and obtain a one-quarter subset from this sample.

(6) You must grind the sample in a mill.

(7) You must use the procedure in paragraph (d)(3) of this section to obtain a one-quarter subsample for analysis. If the quarter sample is too large, subdivide it further using the same procedure.

(e) You must determine the concentration of pollutants in the fuel (mercury and/or chlorine and/or TSM) in units of pounds per million Btu of each composite sample for each fuel type according to the procedures in Table 6 to this subpart, for use in Equations 7, 8, and 9 of this subpart.

(f) To demonstrate that a gaseous fuel other than natural gas or refinery gas qualifies as an other gas 1 fuel, as defined in §63.7575, you must conduct a fuel specification analyses for mercury according to the procedures in paragraphs (g) through (i) of this section and Table 6 to this subpart, as applicable, except as specified in paragraph (f)(1) through (4) of this section, or as an alternative where fuel specification analysis is not practical, you must measure mercury concentration in the exhaust gas when firing only the gaseous fuel to be demonstrated as an
other gas fuel in the boiler or process heater according to the procedures in Table 6 to this subpart.

(1) You are not required to conduct the fuel specification analyses in paragraphs (g) through (i) of this section for natural gas or refinery gas.

(2) You are not required to conduct the fuel specification analyses in paragraphs (g) through (i) of this section for gaseous fuels that are subject to another subpart of this part, part 60, part 61, or part 65.

(3) You are not required to conduct the fuel specification analyses in paragraphs (g) through (i) of this section on gaseous fuels for units that are complying with the limits for units designed to burn gas 2 (other) fuels.

(4) You are not required to conduct the fuel specification analyses in paragraphs (g) through (i) of this section for gas streams directly derived from natural gas at natural gas production sites or natural gas plants.

(g) You must develop a site-specific fuel analysis plan for other gas fuels according to the following procedures and requirements in paragraphs (g)(1) and (2) of this section.

(1) If you intend to use an alternative analytical method other than those required by Table 6 to this subpart, you must submit the fuel analysis plan to the Administrator for review and approval no later than 60 days before the date that you intend to conduct the initial compliance demonstration described in §63.7510.

(2) You must include the information contained in paragraphs (g)(2)(i) through (vi) of this section in your fuel analysis plan.

(i) The identification of all gaseous fuel types other than those exempted from fuel specification analysis under (f)(1) through (3) of this section anticipated to be burned in each boiler or process heater.

(ii) For each anticipated fuel type, the identification of whether you or a fuel supplier will be conducting the fuel specification analysis.

(iii) For each anticipated fuel type, a detailed description of the sample location and specific procedures to be used for collecting and preparing the samples if your procedures are different from the sampling methods contained in Table 6 to this subpart. Samples should be collected at a location that most accurately represents the fuel type, where possible, at a point prior to mixing with other dissimilar fuel types. If multiple boilers or process heaters are fueled by a common fuel stream it is permissible to conduct a single gas specification at the common point of gas distribution.

(iv) For each anticipated fuel type, the analytical methods from Table 6 to this subpart, with the expected minimum detection levels, to be used for the measurement of mercury.

(v) If you request to use an alternative analytical method other than those required by Table 6 to this subpart, you must also include a detailed description of the methods and procedures that you are proposing to use. Methods in Table 6 to this subpart shall be used until the requested alternative is approved.

(vi) If you will be using fuel analysis from a fuel supplier in lieu of site-specific sampling and analysis, the fuel supplier must use the analytical methods required by Table 6 to this subpart. When using a fuel supplier’s fuel analysis, the owner or operator is not required to submit the information in §63.7521(g)(2)(iii).

(h) You must obtain a single fuel sample for each fuel type for fuel specification of gaseous fuels.

(i) You must determine the concentration in the fuel of mercury, in units of microgram per cubic meter, dry basis, of each sample for each other gas fuel type according to the procedures in Table 6 to this subpart.


§63.7522 Can I use emissions averaging to comply with this subpart?

(a) As an alternative to meeting the requirements of §63.7500 for PM (or TSM), HCl, or mercury on a boiler or process heater-specific basis, if you have more than one existing boiler or process heater in any subcategories located at your facility, you may demonstrate compliance by emissions averaging, if your averaged emissions are not more than 90 percent of the applicable emission limit, according to the procedures in this section. You may
(b) For a group of two or more existing boilers or process heaters in the same subcategory that each vent to a separate stack, you may average PM (or TSM), HCl, or mercury emissions among existing units to demonstrate compliance with the limits in Table 2 to this subpart as specified in paragraph (b)(1) through (3) of this section, if you satisfy the requirements in paragraphs (c) through (g) of this section.

(1) You may average units using a CEMS or PM CPMS for demonstrating compliance.

(2) For mercury and HCl, averaging is allowed as follows:
   (i) You may average among units in any of the solid fuel subcategories.
   (ii) You may average among units in any of the liquid fuel subcategories.
   (iii) You may average among units in a subcategory of units designed to burn gas 2 (other) fuels.
   (iv) You may not average across the units designed to burn liquid, units designed to burn solid fuel, and units designed to burn gas 2 (other) subcategories.

(3) For PM (or TSM), averaging is only allowed between units within each of the following subcategories and you may not average across subcategories:
   (i) Units designed to burn coal/solid fossil fuel.
   (ii) Stokers/sloped grate/other units designed to burn kiln dried biomass/bio-based solids.
   (iii) Stokers/sloped grate/other units designed to burn wet biomass/bio-based solids.
   (iv) Fluidized bed units designed to burn biomass/bio-based solid.
   (v) Suspension burners designed to burn biomass/bio-based solid.
   (vi) Dutch ovens/pile burners designed to burn biomass/bio-based solid.
   (vii) Fuel Cells designed to burn biomass/bio-based solid.
   (viii) Hybrid suspension/grate burners designed to burn wet biomass/bio-based solid.
   (ix) Units designed to burn heavy liquid fuel.
   (x) Units designed to burn light liquid fuel.
   (xi) Units designed to burn liquid fuel that are non-continental units.
   (xii) Units designed to burn gas 2 (other) gases.

(c) For each existing boiler or process heater in the averaging group, the emission rate achieved during the initial compliance test for the HAP being averaged must not exceed the emission level that was being achieved on April 1, 2013 or the control technology employed during the initial compliance test must not be less effective for the HAP being averaged than the control technology employed on April 1, 2013.

(d) The averaged emissions rate from the existing boilers and process heaters participating in the emissions averaging option must not exceed 90 percent of the limits in Table 2 to this subpart at all times the affected units are subject to numeric emission limits following the compliance date specified in §63.7495.

(e) You must demonstrate initial compliance according to paragraph (e)(1) or (2) of this section using the maximum rated heat input capacity or maximum steam generation capacity of each unit and the results of the initial performance tests or fuel analysis.

(1) You must use Equation 1a or 1b or 1c of this section to demonstrate that the PM (or TSM), HCl, or mercury emissions from all existing units participating in the emissions averaging option for that pollutant do not exceed the emission limits in Table 2 to this subpart. Use Equation 1a if you are complying with the emission limits on a heat input basis, use Equation 1b if you are complying with the emission limits on a steam generation (output) basis, and use Equation 1c if you are complying with the emission limits on a electric generation (output) basis.

\[
\text{AveWeightedEmissions} = 1.1 \times \frac{\sum_{i=1}^{n} (Er \times Hm)}{\sum_{i=1}^{n} Hm} 
\]  

(Eq. 1.a)
Where:
AveWeightedEmissions = Average weighted emissions for PM (or TSM), HCl, or mercury, in units of pounds per million Btu of heat input.
Er = Emission rate (as determined during the initial compliance demonstration) of PM (or TSM), HCl, or mercury from unit, i, in units of pounds per million Btu of heat input. Determine the emission rate for PM (or TSM), HCl, or mercury by performance testing according to Table 5 to this subpart, or by fuel analysis for HCl or mercury or TSM using the applicable equation in §63.7530(c).
Hm = Maximum rated heat input capacity of unit, i, in units of million Btu per hour.
n = Number of units participating in the emissions averaging option.
1.1 = Required discount factor.

\[
AveWeightedEmissions = 1.1 \times \sum_{i=1}^{n} \left( Er \times So \right) \div \sum_{i=1}^{n} So \quad (Eq.\ 1b)
\]

Where:
AveWeightedEmissions = Average weighted emissions for PM (or TSM), HCl, or mercury, in units of pounds per million Btu of steam output.
Er = Emission rate (as determined during the initial compliance demonstration) of PM (or TSM), HCl, or mercury from unit, i, in units of pounds per million Btu of steam output. Determine the emission rate for PM (or TSM), HCl, or mercury by performance testing according to Table 5 to this subpart, or by fuel analysis for HCl or mercury or TSM using the applicable equation in §63.7530(c). If you are taking credit for energy conservation measures from a unit according to §63.7533, use the adjusted emission level for that unit, Eadj, determined according to §63.7533 for that unit.
So = Maximum steam output capacity of unit, i, in units of million Btu per hour, as defined in §63.7575.
n = Number of units participating in the emissions averaging option.
1.1 = Required discount factor.

\[
AveWeightedEmissions = 1.1 \times \sum_{i=1}^{n} \left( Er \times Eo \right) \div \sum_{i=1}^{n} Eo \quad (Eq.\ 1c)
\]

Where:
AveWeightedEmissions = Average weighted emissions for PM (or TSM), HCl, or mercury, in units of pounds per megawatt hour.
Er = Emission rate (as determined during the initial compliance demonstration) of PM (or TSM), HCl, or mercury by performance testing according to Table 5 to this subpart, or by fuel analysis for HCl or mercury or TSM using the applicable equation in §63.7530(c). If you are taking credit for energy conservation measures from a unit according to §63.7533, use the adjusted emission level for that unit, Eadj, determined according to §63.7533 for that unit.
Eo = Maximum electric generating output capacity of unit, i, in units of megawatt hour, as defined in §63.7575.
n = Number of units participating in the emissions averaging option.
1.1 = Required discount factor.

(2) If you are not capable of determining the maximum rated heat input capacity of one or more boilers that generate steam, you may use Equation 2 of this section as an alternative to using Equation 1a of this section to demonstrate that the PM (or TSM), HCl, or mercury emissions from all existing units participating in the emissions averaging option do not exceed the emission limits for that pollutant in Table 2 to this subpart that are in pounds per million Btu of heat input.
1.1 = Required discount factor.

Where:

\[ \text{AveWeightedEmissions} = \text{Average weighted emission level for PM (or TSM), HCl, or mercury, in units of pounds per million Btu of heat input.} \]

\[ \text{Er} = \text{Emission rate (as determined during the most recent compliance demonstration) of PM (or TSM), HCl, or mercury from unit, i, in units of pounds per million Btu of heat input. Determine the emission rate for PM (or TSM), HCl, or mercury by performance testing according to Table 5 to this subpart, or by fuel analysis for HCl or mercury or TSM using the applicable equation in § 63.7530(c).} \]

\[ \text{Sm} = \text{Maximum steam generation capacity by unit, i, in units of pounds per hour.} \]

\[ \text{Cfi} = \text{Conversion factor, calculated from the most recent compliance test, in units of million Btu of heat input per pounds of steam generated for unit, i.} \]

1.1 = Required discount factor.

(f) After the initial compliance demonstration described in paragraph (e) of this section, you must demonstrate compliance on a monthly basis determined at the end of every month (12 times per year) according to paragraphs (f)(1) through (3) of this section.

The first monthly period begins on the compliance date specified in § 63.7495. If the affected source elects to collect monthly data for up to the 11 months preceding the first monthly period, these additional data points can be used to compute the 12-month rolling average in paragraph (f)(3) of this section.

(1) For each calendar month, you must use Equation 3a or 3b or 3c of this section to calculate the average weighted emission rate for that month. Use Equation 3a and the actual heat input for the month for each existing unit participating in the emissions averaging option if you are complying with emission limits on a heat input basis. Use Equation 3b and the actual steam generation for the month if you are complying with the emission limits on a steam generation (output) basis. Use Equation 3c and the actual electrical generation for the month if you are complying with the emission limits on an electrical generation (output) basis.

\[ \text{AveWeightedEmissions} = 1.1 \times \sum_{i=1}^{n} (Er \times Sm \times Cfi) \div \sum_{i=1}^{n} (Sm \times Cfi) \quad \text{(Eq. 2)} \]

Where:

\[ \text{AveWeightedEmissions} = \text{Average weighted emission level for PM (or TSM), HCl, or mercury, in units of pounds per million Btu of heat input.} \]

\[ \text{Er} = \text{Emission rate (as determined during the most recent compliance demonstration) of PM (or TSM), HCl, or mercury from unit, i, in units of pounds per million Btu of heat input. Determine the emission rate for PM (or TSM), HCl, or mercury by performance testing according to Table 5 to this subpart, or by fuel analysis for HCl or mercury or TSM using the applicable equation in § 63.7530(c).} \]

\[ \text{Sm} = \text{Maximum steam generation capacity by unit, i, in units of pounds per hour.} \]

\[ \text{Cfi} = \text{Conversion factor, calculated from the most recent compliance test, in units of million Btu of heat input per pounds of steam generated for unit, i.} \]

1.1 = Required discount factor.

Where:

\[ \text{AveWeightedEmissions} = \text{Average weighted emission level for PM (or TSM), HCl, or mercury, in units of pounds per million Btu of heat input.} \]

\[ \text{Er} = \text{Emission rate (as determined during the most recent compliance demonstration) of PM (or TSM), HCl, or mercury from unit, i, in units of pounds per million Btu of heat input. Determine the emission rate for PM (or TSM), HCl, or mercury by performance testing according to Table 5 to this subpart, or by fuel analysis for HCl or mercury or TSM according to Table 6 to this subpart.} \]

\[ \text{Hb} = \text{The heat input for that calendar month to unit, i, in units of million Btu.} \]

\[ n = \text{Number of units participating in the emissions averaging option.} \]

1.1 = Required discount factor.

Where:

\[ \text{AveWeightedEmissions} = \text{Average weighted emission level for PM (or TSM), HCl, or mercury, in units of pounds per million Btu of heat input.} \]

\[ \text{Er} = \text{Emission rate (as determined during the most recent compliance demonstration) of PM (or TSM), HCl, or mercury from unit, i, in units of pounds per million Btu of heat input. Determine the emission rate for PM (or TSM), HCl, or mercury by performance testing according to Table 5 to this subpart, or by fuel analysis for HCl or mercury or TSM according to Table 6 to this subpart.} \]

\[ \text{Hb} = \text{The heat input for that calendar month to unit, i, in units of million Btu.} \]

\[ n = \text{Number of units participating in the emissions averaging option.} \]

1.1 = Required discount factor.

Where:

\[ \text{AveWeightedEmissions} = \text{Average weighted emission level for PM (or TSM), HCl, or mercury, in units of pounds per million Btu of heat input.} \]
mercury, in units of pounds per million Btu of steam output, for that calendar month. Er = Emission rate (as determined during the most recent compliance demonstration) of PM (or TSM), HCl, or mercury from unit, i, in units of pounds per million Btu of steam output. Determine the emission rate for PM (or TSM), HCl, or mercury by performance testing according to Table 5 to this subpart, or by fuel analysis for HCl or mercury or TSM according to Table 6 to this subpart. If you are taking credit for energy conservation measures from a unit according to §63.7533, use the adjusted emission level for that unit, E\textsubscript{adj}, determined according to §63.7533 for that unit.

So = The steam output for that calendar month from unit, i, in units of million Btu, as defined in §63.7575.
n = Number of units participating in the emissions averaging option.

1.1 = Required discount factor.

Where:

\[ \text{AveWeightedEmissions} = 1.1 \times \sum_{i=1}^{n} \left( Er \times Eo \right) + \sum_{i=1}^{n} Eo \] (Eq. 3c)

determined according to §63.7533 for that unit.

Eo = The electric generating output for that calendar month from unit, i, in units of megawatt hour, as defined in §63.7575.
n = Number of units participating in the emissions averaging option.

1.1 = Required discount factor.

(2) If you are not capable of monitoring heat input, you may use Equation 4 of this section as an alternative to using Equation 3a of this section to calculate the average weighted emission rate using the actual steam generation from the boilers participating in the emissions averaging option.

\[ \text{AveWeightedEmissions} = 1.1 \times \sum_{i=1}^{n} \left( Er \times Sa \times Cfi \right) + \sum_{i=1}^{n} \left( Sa \times Cfi \right) \] (Eq. 4)

Where:

\[ \text{AveWeightedEmissions} = \text{average weighted emission level for PM (or TSM), HCl, or mercury, in units of pounds per megawatt hour, for that calendar month.} \]

\[ Er = \text{Emission rate (as determined during the most recent compliance demonstration of PM (or TSM), HCl, or mercury from unit, i, in units of pounds per million Btu of heat input.} \]

\[ Sa = \text{Actual steam generation for that calendar month by boiler, i, in units of pounds.} \]

\[ Cfi = \text{Conversion factor, as calculated during the most recent compliance test, in units of million Btu of heat input per pounds of steam generated for boiler, i.} \]

1.1 = Required discount factor.

(3) Until 12 monthly weighted average emission rates have been accumulated, calculate and report only the average weighted emission rate determined under paragraph (f)(1) or (2) of this section for each calendar month. After 12 monthly weighted average emission rates have been accumulated, for each subsequent calendar month, use Equation 5 of this section to calculate the 12-month rolling average of
the monthly weighted average emission rates for the current calendar month and the previous 11 calendar months.

\[ E_{avg} = \sum_{i=1}^{12} ER_i + 12 \quad \text{(Eq. 5)} \]

Where:
- \( E_{avg} \) = 12-month rolling average emission rate, (pounds per million Btu heat input)
- \( ER_i \) = Monthly weighted average, for calendar month “\( i \)” (pounds per million Btu heat input), as calculated by paragraph (f)(1) or (2) of this section.

(g) You must develop, and submit upon request to the applicable Administrator for review and approval, an implementation plan for emission averaging according to the following procedures and requirements in paragraphs (g)(1) through (4) of this section.

(1) If requested, you must submit the implementation plan no later than 180 days before the date that the facility intends to demonstrate compliance using the emission averaging option.

(2) You must include the information contained in paragraphs (g)(2)(i) through (vii) of this section in your implementation plan for all emission sources included in an emissions average:

(i) The identification of all existing boilers and process heaters in the averaging group, including for each either the applicable HAP emission level or the control technology installed as of January 31, 2013 and the date on which you are requesting emission averaging to commence;

(ii) The process parameter (heat input or steam generated) that will be monitored for each averaging group;

(iii) The specific control technology or pollution prevention measure to be used for each emission boiler or process heater in the averaging group and the date of its installation or application. If the pollution prevention measure reduces or eliminates emissions from multiple boilers or process heaters, the owner or operator must identify each boiler or process heater;

(iv) The test plan for the measurement of PM (or TSM), HCl, or mercury emissions in accordance with the requirements in §63.7520;

(v) The operating parameters to be monitored for each control system or device consistent with §63.7500 and Table 4, and a description of how the operating limits will be determined;

(vi) If you request to monitor an alternative operating parameter pursuant to §63.7525, you must also include:

(A) A description of the parameter(s) to be monitored and an explanation of the criteria used to select the parameter(s); and

(B) A description of the methods and procedures that will be used to demonstrate that the parameter indicates proper operation of the control device; the frequency and content of monitoring, reporting, and recordkeeping requirements; and a demonstration, to the satisfaction of the Administrator, that the proposed monitoring frequency is sufficient to represent control device operating conditions; and

(vii) A demonstration that compliance with each of the applicable emission limit(s) will be achieved under representative operating load conditions. Following each compliance demonstration and until the next compliance demonstration, you must comply with the operating limit for operating load conditions specified in Table 4 to this subpart.

(3) If submitted upon request, the Administrator shall review and approve or disapprove the plan according to the following criteria:

(i) Whether the content of the plan includes all of the information specified in paragraph (g)(2) of this section; and

(ii) Whether the plan presents sufficient information to determine that compliance will be achieved and maintained.

(4) The applicable Administrator shall not approve an emission averaging implementation plan containing any of the following provisions:
§ 63.7525 What are my monitoring, installation, operation, and maintenance requirements?

(a) If your boiler or process heater is subject to a CO emission limit in Tables 1, 2, or 11 through 13 to this subpart, you must install, operate, and maintain an oxygen analyzer system, as defined in § 63.7575, or install, certify, operate and maintain continuous emission monitoring systems for CO and oxygen (or carbon dioxide (CO₂)) according to the procedures in paragraphs (a)(1) through (6) of this section.

(1) Install the CO CEMS and oxygen (or CO₂) analyzer by the compliance date specified in § 63.7495. The CO and oxygen (or CO₂) levels shall be monitored at the same location at the outlet of the boiler or process heater. An
owner or operator may request an alternative test method under §63.7 of this chapter, in order that compliance with the CO emissions limit be determined using CO$_2$ as a diluent correction in place of oxygen at 3 percent. EPA Method 19 F-factors and EPA Method 19 equations must be used to generate the appropriate CO$_2$ correction percentage for the fuel type burned in the unit, and must also take into account that the 3 percent oxygen correction is to be done on a dry basis. The alternative test method request must account for any CO$_2$ being added to, or removed from, the emissions gas stream as a result of limestone injection, scrubber media, etc.

(2) To demonstrate compliance with the applicable alternative CO CEMS emission standard listed in Tables 1, 2, or 11 through 13 to this subpart, you must install, certify, operate, and maintain a CO CEMS and an oxygen analyzer according to the applicable procedures under Performance Specification 4, 4A, or 4B at 40 CFR part 60, appendix B; part 75 of this chapter (if an CO$_2$ analyzer is used); the site-specific monitoring plan developed according to §63.7505(d) and paragraph (a) of this section. Any boiler or process heater that has a CO CEMS that is compliant with Performance Specification 4, 4A, or 4B at 40 CFR part 60, appendix B, a site-specific monitoring plan developed according to §63.7505(d) and the requirements in §63.7540(a)(8) and paragraph (a) of this section must use the CO CEMS to comply with the applicable alternative CO CEMS emission standard listed in Tables 1, 2, or 11 through 13 to this subpart.

(i) You must conduct a performance evaluation of each CO CEMS according to the requirements in §63.8(e) and according to Performance Specification 4, 4A, or 4B at 40 CFR part 60, appendix B.

(ii) During each relative accuracy test run of the CO CEMS, you must collect emission data for CO concurrently (or within a 30- to 60-minute period) by both the CO CEMS and by Method 10, 10A, or 10B at 40 CFR part 60, appendix A–4. The relative accuracy testing must be at representative operating conditions.

(iii) You must follow the quality assurance procedures (e.g., quarterly accuracy determinations and daily calibration drift tests) of Procedure 1 of appendix F to part 60. The measurement span value of the CO CEMS must be two times the applicable CO emission limit, expressed as a concentration.

(iv) Any CO CEMS that does not comply with §63.7525(a) cannot be used to meet any requirement in this subpart to demonstrate compliance with a CO emission limit listed in Tables 1, 2, or 11 through 13 to this subpart.

(v) For a new unit, complete the initial performance evaluation no later than July 30, 2013, or 180 days after the date of initial startup, whichever is later. For an existing unit, complete the initial performance evaluation no later than July 29, 2016.

(vi) When CO$_2$ is used to correct CO emissions and CO$_2$ is measured on a wet basis, correct for moisture as follows: Install, operate, maintain, and quality assure a continuous moisture monitoring system for measuring and recording the moisture content of the flue gases, in order to correct the measured hourly volumetric flow rates for moisture when calculating CO concentrations. The following continuous moisture monitoring systems are acceptable: A continuous moisture sensor; an oxygen analyzer (or analyzers) capable of measuring O$_2$ both on a wet basis and on a dry basis; or a stack temperature sensor and a moisture look-up table, i.e., a psychrometric chart (for saturated gas streams following wet scrubbers or other demonstrably saturated gas streams, only). The moisture monitoring system shall include as a component the automated data acquisition and handling system (DAHS) for recording and reporting both the raw data (e.g., hourly average wet-and dry basis O$_2$ values) and the hourly average values of the stack gas moisture content derived from those data. When a moisture look-up table is used, the moisture monitoring system shall be represented as a single component, the certified DAHS, in the monitoring plan for the unit or common stack.
(3) Complete a minimum of one cycle of CO and oxygen (or \(\text{CO}_2\)) CEMS operation (sampling, analyzing, and data recording) for each successive 15-minute period. Collect at least four CO and oxygen (or \(\text{CO}_2\)) CEMS data values representing the four 15-minute periods in an hour, or at least two 15-minute data values during an hour when CEMS calibration, quality assurance, or maintenance activities are being performed.

(4) Reduce the CO CEMS data as specified in §63.8(g)(2).

(5) Calculate one-hour arithmetic averages, corrected to 3 percent oxygen (or corrected to an \(\text{CO}_2\) percentage determined to be equivalent to 3 percent oxygen) from each hour of CO CEMS data in parts per million CO concentration. The one-hour arithmetic averages required shall be used to calculate the 30-day or 10-day rolling average emissions. Use Equation 19–19 in section 12.4.1 of Method 19 of 40 CFR part 60, appendix A–7 for calculating the average CO concentration from the hourly values.

(6) For purposes of collecting CO data, operate the CO CEMS as specified in §63.7535(b). You must use all the data collected during all periods in calculating data averages and assessing compliance, except that you must exclude certain data as specified in §63.7535(c). Periods when CO data are unavailable may constitute monitoring deviations as specified in §63.7535(d).

(7) Operate an oxygen trim system with the oxygen level set no lower than the lowest hourly average oxygen concentration measured during the most recent CO performance test as the operating limit for oxygen according to Table 7 to this subpart.

(b) If your boiler or process heater is in the unit designed to burn coal/solid fossil fuel subcategory or the unit designed to burn heavy liquid subcategory and has an average annual heat input rate greater than 200 MMBtu per hour from solid fossil fuel and/or heavy liquid, and you demonstrate compliance with the PM limit instead of the alternative TSM limit, you must install, maintain, and operate a PM CEMS monitoring emissions discharged to the atmosphere and record the output of the system as specified in paragraphs (b)(1) through (4) of this section. As an alternative to use of a PM CPMS to demonstrate compliance with the PM limit, you may choose to use a PM CEMS. If you choose to use a PM CEMS to demonstrate compliance with the PM limit instead of the alternative TSM limit, you must install, certify, maintain, and operate a PM CEMS monitoring emissions discharged to the atmosphere and record the output of the system as specified in paragraph (b)(5) through (8) of this section. For other boilers or process heaters, you may elect to use a PM CPMS or PM CEMS operated in accordance with this section in lieu of using other CMS for monitoring PM compliance (e.g., bag leak detectors, ESP secondary power, and PM scrubber pressure). Owners of boilers and process heaters who elect to comply with the alternative TSM limit are not required to install a PM CPMS.

(1) Install, operate, and maintain your PM CPMS according to the procedures in your approved site-specific monitoring plan developed in accordance with §63.7565(d), the requirements in §63.7540(a)(9), and paragraphs (b)(1)(i) through (iii) of this section.

(i) The operating principle of the PM CPMS must be based on in-stack or extractive light scatter, light scintillation, beta attenuation, or mass accumulation detection of PM in the exhaust gas or representative exhaust gas sample. The reportable measurement output from the PM CPMS must be expressed as milligrams.

(ii) The PM CPMS must have a cycle time (i.e., period required to complete sampling, measurement, and reporting for each measurement) no longer than 60 minutes.

(iii) The PM CPMS must have a documented detection limit of 0.5 milligram per actual cubic meter, or less.

(2) For a new unit, complete the initial performance evaluation no later than July 30, 2013, or 180 days after the date of initial startup, whichever is later. For an existing unit, complete the initial performance evaluation no later than July 29, 2016.

(3) Collect PM CPMS hourly average output data for all boiler or process
heater operating hours except as indicated in §63.7535(a) through (d). Express the PM CPMS output as milliamps.

(4) Calculate the arithmetic 30-day rolling average of all of the hourly average PM CPMS output data collected during all boiler or process heater operating hours (milliamps).

(5) Install, certify, operate, and maintain your PM CEMS according to the procedures in your approved site-specific monitoring plan developed in accordance with §63.7505(d), the requirements in §63.7540(a)(9), and paragraphs (b)(5)(i) through (iv) of this section.

(i) You shall conduct a performance evaluation of the PM CEMS according to the applicable requirements of §60.8(e), and Performance Specification 11 at 40 CFR part 60, appendix B of this chapter.

(ii) During each PM correlation testing run of the CEMS required by Performance Specification 11 at 40 CFR part 60, appendix B of this chapter, you shall collect PM and oxygen (or carbon dioxide) data concurrently (or within a 30-to 60-minute period) by both the CEMS and conducting performance tests using Method 5 at 40 CFR part 60, appendix A-3 or Method 17 at 40 CFR part 60, appendix A-6 of this chapter.

(iii) You shall perform quarterly accuracy determinations and daily calibration drift tests in accordance with Procedure 2 at 40 CFR part 60, appendix F of this chapter. You must perform Relative Response Audits annually and perform Response Correlation Audits every 3 years.

(iv) Within 60 days after the date of completing each CEMS relative accuracy test audit or performance test conducted to demonstrate compliance with this subpart, you must submit the relative accuracy test audit data and performance test data to the EPA by successfully submitting the data electronically into the EPA's Central Data Exchange by using the Electronic Reporting Tool (see http://www.epa.gov/ttn/chief/ert/erttool.html/).

(6) For a new unit, complete the initial performance evaluation no later than July 30, 2013, or 180 days after the date of initial startup, whichever is later. For an existing unit, complete the initial performance evaluation no later than July 29, 2016.

(7) Collect PM CEMS hourly average output data for all boiler or process heater operating hours except as indicated in §63.7535(a) through (d).

(8) Calculate the arithmetic 30-day rolling average of all of the hourly average PM CEMS output data collected during all boiler or process heater operating hours.

(c) If you have an applicable opacity operating limit in this rule, and are not otherwise required or elect to install and operate a PM CPMS, PM CEMS, or a bag leak detection system, you must install, operate, certify and maintain each COMS according to the procedures in paragraphs (c)(1) through (7) of this section by the compliance date specified in §63.7485.

(1) Each COMS must be installed, operated, and maintained according to Performance Specification 1 at appendix B to part 60 of this chapter.

(2) You must conduct a performance evaluation of each COMS according to the requirements in §63.8(e) and according to Performance Specification 1 at appendix B to part 60 of this chapter.

(3) As specified in §63.8(c)(4)(i), each COMS must 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.

(4) The COMS data must be reduced as specified in §63.8(g)(2).

(5) You must include in your site-specific monitoring plan procedures and acceptance criteria for operating and maintaining each COMS according to the requirements in §63.8(d). At a minimum, the monitoring plan must include a daily calibration drift assessment, a quarterly performance audit, and an annual zero alignment audit of each COMS.

(6) You must operate and maintain each COMS according to the requirements in the monitoring plan and the requirements of §63.8(e). You must identify periods the COMS is out of control including any periods that the COMS fails to pass a daily calibration drift assessment, a quarterly performance audit, or an annual zero alignment audit. Any 6-minute period for which the monitoring system is out of control and data are not available for a
required calculation constitutes a deviation from the monitoring requirements.

(7) You must determine and record all the 6-minute averages (and daily block averages as applicable) collected for periods during which the COMS is not out of control.

(d) If you have an operating limit that requires the use of a CMS other than a PM CPMS or COMS, you must install, operate, and maintain each CMS according to the procedures in paragraphs (d)(1) through (5) of this section by the compliance date specified in §63.7465.

(1) The CPMS must complete a minimum of one cycle of operation every 15-minutes. You must have a minimum of four successive cycles of operation, one representing each of the four 15-minute periods in an hour, to have a valid hour of data.

(2) You must operate the monitoring system as specified in §63.7535(b), and comply with the data calculation requirements specified in §63.7535(c).

(3) Any 15-minute period for which the monitoring system is out-of-control and data are not available for a required calculation constitutes a deviation from the monitoring requirements. Other situations that constitute a monitoring deviation are specified in §63.7535(d).

(4) You must determine the 30-day rolling average of all recorded readings, except as provided in §63.7535(c).

(5) You must record the results of each inspection, calibration, and validation check.

(e) If you have an operating limit that requires the use of a flow monitoring system, you must meet the requirements in paragraphs (d) and (e)(1) through (4) of this section.

(1) You must install the flow sensor and other necessary equipment in a position that provides a representative flow.

(2) You must use a flow sensor with a measurement sensitivity of no greater than 2 percent of the design flow rate.

(3) You must minimize, consistent with good engineering practices, the effects of swirling flow or abnormal velocity distributions due to upstream and downstream disturbances.

(4) You must conduct a flow monitoring system performance evaluation in accordance with your monitoring plan at the time of each performance test but no less frequently than annually.

(f) If you have an operating limit that requires the use of a pressure monitoring system, you must meet the requirements in paragraphs (d) and (f)(1) through (6) of this section.

(1) Install the pressure sensor(s) in a position that provides a representative measurement of the pressure (e.g., PM scrubber pressure drop).

(2) Minimize or eliminate pulsating pressure, vibration, and internal and external corrosion consistent with good engineering practices.

(3) Use a pressure sensor with a minimum tolerance of 1.27 centimeters of water or a minimum tolerance of 1 percent of the pressure monitoring system operating range, whichever is less.

(4) Perform checks at least once each process operating day to ensure pressure measurements are not obstructed (e.g., check for pressure tap pluggage daily).

(5) Conduct a performance evaluation of the pressure monitoring system in accordance with your monitoring plan at the time of each performance test but no less frequently than annually.

(6) If at any time the measured pressure exceeds the manufacturer’s specified maximum operating pressure range, conduct a performance evaluation of the pressure monitoring system in accordance with your monitoring plan and confirm that the pressure monitoring system continues to meet the performance requirements in your monitoring plan. Alternatively, install and verify the operation of a new pressure sensor.

(g) If you have an operating limit that requires a pH monitoring system, you must meet the requirements in paragraphs (d) and (g)(1) through (4) of this section.

(1) Install the pH sensor in a position that provides a representative measurement of scrubber effluent pH.

(2) Ensure the sample is properly mixed and representative of the fluid to be measured.
(3) Calibrate the pH monitoring system in accordance with your monitoring plan and according to the manufacturer’s instructions. Clean the pH probe at least once each process operating day. Maintain on-site documentation that your calibration frequency is sufficient to maintain the specified accuracy of your device.

(4) Conduct a performance evaluation (including a two-point calibration with one of the two buffer solutions having a pH within 1 of the pH of the operating limit) of the pH monitoring system in accordance with your monitoring plan at the time of each performance test but no less frequently than annually.

(h) If you have an operating limit that requires a secondary electric power monitoring system for an electrostatic precipitator (ESP) operated with a wet scrubber, you must meet the requirements in paragraphs (h)(1) and (2) of this section.

(1) Install sensors to measure (secondary) voltage and current to the precipitator collection plates.

(2) Conduct a performance evaluation of the electric power monitoring system in accordance with your monitoring plan at the time of each performance test but no less frequently than annually.

(i) If you have an operating limit that requires the use of a monitoring system to measure sorbent injection rate (e.g., weigh belt, weigh hopper, or hopper flow measurement device), you must meet the requirements in paragraphs (d) and (i)(1) through (2) of this section.

(1) Install the system in a position(s) that provides a representative measurement of the total sorbent injection rate.

(2) Conduct a performance evaluation of the sorbent injection rate monitoring system in accordance with your monitoring plan at the time of each performance test but no less frequently than annually.

(j) If you are not required to use a PM CPMS and elect to use a fabric filter bag leak detection system to comply with the requirements of this subpart, you must install, calibrate, maintain, and continuously operate the bag leak detection system as specified in paragraphs (j)(1) through (6) of this section.

(1) You must install a bag leak detection sensor(s) in a position(s) that will be representative of the relative or absolute PM loadings for each exhaust stack, roof vent, or compartment (e.g., for a positive pressure fabric filter) of the fabric filter.

(2) Conduct a performance evaluation of the bag leak detection system in accordance with your monitoring plan and consistent with the guidance provided in EPA–454/R–98–015 (incorporated by reference, see §63.14).

(3) Use a bag leak detection system certified by the manufacturer to be capable of detecting PM emissions at concentrations of 10 milligrams per actual cubic meter or less.

(4) Use a bag leak detection system equipped with a device to record continuously the output signal from the sensor.

(5) Use a bag leak detection system equipped with a system that will alert plant operating personnel when an increase in relative PM emissions over a preset level is detected. The alert must easily recognizable (e.g., heard or seen) by plant operating personnel.

(6) Where multiple bag leak detectors are required, the system’s instrumentation and alert may be shared among detectors.

(k) For each unit that meets the definition of limited-use boiler or process heater, you must keep fuel use records for the days the boiler or process heater was operating.

(l) For each unit for which you decide to demonstrate compliance with the mercury or HCl emissions limits in Tables 1 or 2 or 11 through 13 of this subpart by use of a CEMS for mercury or HCl, you must install, certify, maintain, and operate a CEMS measuring emissions discharged to the atmosphere and record the output of the system as specified in paragraphs (l)(1) through (8) of this section. For HCl, this option for an affected unit takes effect on the date a final performance specification for a HCl CEMS is published in the Federal Register or the date of approval of a site-specific monitoring plan.

(1) Notify the Administrator one month before starting use of the
§ 63.7525 CEMS, and notify the Administrator one month before stopping use of the CEMS.

(2) Each CEMS shall be installed, certified, operated, and maintained according to the requirements in § 63.7540(a)(14) for a mercury CEMS and § 63.7540(a)(15) for a HCl CEMS.

(3) For a new unit, you must complete the initial performance evaluation of the CEMS by the latest of the dates specified in paragraph (l)(3)(i) through (iii) of this section.

(i) No later than July 30, 2013.

(ii) No later 180 days after the date of initial startup.

(iii) No later 180 days after notifying the Administrator before starting to use the CEMS in place of performance testing or fuel analysis to demonstrate compliance.

(4) For an existing unit, you must complete the initial performance evaluation by the latter of the two dates specified in paragraph (l)(4)(i) and (ii) of this section.

(i) No later than July 29, 2016.

(ii) No later 180 days after notifying the Administrator before starting to use the CEMS in place of performance testing or fuel analysis to demonstrate compliance.

(5) Compliance with the applicable emissions limit shall be determined based on the 30-day rolling average of the hourly arithmetic average emissions rates using the continuous monitoring system outlet data. The 30-day rolling arithmetic average emission rate (lb/MMBtu) shall be calculated using the equations in EPA Reference Method 19 at 40 CFR part 60, appendix A–7, but substituting the mercury or HCl concentration for the pollutant concentrations normally used in Method 19.

(6) Collect CEMS hourly averages for all operating hours on a 30-day rolling average basis. Collect at least four CMS data values representing the four 15-minute periods in an hour, or at least two 15-minute data values during an hour when CMS calibration, quality assurance, or maintenance activities are being performed.

(7) The one-hour arithmetic averages required shall be expressed in lb/MMBtu and shall be used to calculate the boiler 30-day and 10-day rolling average emissions.

(8) You are allowed to substitute the use of the PM, mercury or HCl CEMS for the applicable fuel analysis, annual performance test, and operating limits specified in Table 4 to this subpart to demonstrate compliance with the PM, mercury or HCl emissions limit, and if you are using an acid gas wet scrubber or dry sorbent injection control technology to comply with the HCl emission limit, you are allowed to substitute the use of a sulfur dioxide (SO\textsubscript{2}) CEMS for the applicable fuel analysis, annual performance test, and operating limits specified in Table 4 to this subpart to demonstrate compliance with HCl emissions limit.

(m) If your unit is subject to a HCl emission limit in Tables 1, 2, or 11 through 13 of this subpart and you have an acid gas wet scrubber or dry sorbent injection control technology and you elect to use an SO\textsubscript{2} CEMS to demonstrate continuous compliance with the HCl emission limit, you must install the monitor at the outlet of the boiler or process heater, downstream of all emission control devices, and you must install, certify, operate, and maintain the CEMS according to either part 60 or part 75 of this chapter.

(1) The SO\textsubscript{2} CEMS must be installed by the compliance date specified in § 63.7495.

(2) For on-going quality assurance (QA), the SO\textsubscript{2} CEMS must meet either the applicable daily and quarterly requirements in Procedure 1 of appendix F of part 60 or the applicable daily, quarterly, and semiannual or annual requirements in sections 2.1 through 2.3 of appendix B to part 75 of this chapter, with the following addition: You must perform the linearity checks required in section 2.2 of appendix B to part 75 of this chapter if the SO\textsubscript{2} CEMS has a span value of 30 ppm or less.

(3) For a new unit, the initial performance evaluation shall be completed no later than July 30, 2013, or 180 days after the date of initial startup, whichever is later. For an existing unit, the initial performance evaluation shall be completed no later than July 29, 2016.

(4) For purposes of collecting SO\textsubscript{2} data, you must operate the SO\textsubscript{2} CEMS
as specified in §63.7535(b). You must use all the data collected during all periods in calculating data averages and assessing compliance, except that you must exclude certain data as specified in §63.7535(c). Periods when SO$_2$ data are unavailable may constitute monitoring deviations as specified in §63.7535(d).

(5) Collect CEMS hourly averages for all operating hours on a 30-day rolling average basis.

(6) Use only unadjusted, quality-assured SO$_2$ concentration values in the emissions calculations; do not apply bias adjustment factors to the part 75 SO$_2$ data and do not use part 75 substitute data values.


§ 63.7530 How do I demonstrate initial compliance with the emission limitations, fuel specifications and work practice standards?

(a) You must demonstrate initial compliance with each emission limit that applies to you by conducting initial performance tests and fuel analyses and establishing operating limits, as applicable, according to §63.7520, paragraphs (b) and (c) of this section, and Tables 5 and 7 to this subpart. The requirement to conduct a fuel analysis is not applicable for units that burn a single type of fuel, as specified by §63.7510(a)(2). If applicable, you must also install, operate, and maintain all applicable CMS (including CEMS, COMS, and CPMS) according to §63.7525.

(b) If you demonstrate compliance through performance stack testing, you must establish each site-specific operating limit in Table 4 to this subpart that applies to you according to the requirements in §63.7520, Table 7 to this subpart, and paragraph (b)(4) of this section, as applicable. You must also conduct fuel analyses according to §63.7521 and establish maximum fuel pollutant input levels according to paragraphs (b)(1) through (3) of this section, as applicable, and as specified in §63.7510(a)(2). (Note that §63.7510(a)(2) exempts certain fuels from the fuel analysis requirements.) However, if you switch fuel(s) and cannot show that the new fuel(s) does (do) not increase the chlorine, mercury, or TSM input into the unit through the results of fuel analysis, then you must repeat the performance test to demonstrate compliance while burning the new fuel(s).

(1) You must establish the maximum chlorine fuel input (Clinput) during the initial fuel analysis according to the procedures in paragraphs (b)(1)(i) through (iii) of this section.

(i) You must determine the fuel type or fuel mixture that you could burn in your boiler or process heater that has the highest content of chlorine.

(ii) During the fuel analysis for hydrogen chloride, you must determine the fraction of the total heat input for each fuel type burned (Qi) based on the fuel mixture that has the highest content of chlorine, and the average chlorine concentration of each fuel type burned (Ci).

(iii) You must establish a maximum chlorine input level using Equation 7 of this section.

\[
\text{Cl}_{\text{input}} = \sum_{i=1}^{n} (C_i \times Q_i) \quad \text{(Eq. 7)}
\]

Where:

- $\text{Cl}_{\text{input}}$ = Maximum amount of chlorine entering the boiler or process heater through fuels burned in units of pounds per million Btu.
- $C_i$ = Arithmetic average concentration of chlorine in fuel type, $i$, analyzed according to §63.7521, in units of pounds per million Btu.
- $Q_i$ = Fraction of total heat input from fuel type, $i$, based on the fuel mixture that has the highest content of chlorine during the initial compliance test. If you do not burn multiple fuel types during the performance testing, it is not necessary
to determine the value of this term. Insert a value of ‘‘1’’ for Qi. For continuous compliance demonstration, the actual fraction of the fuel burned during the month should be used.

(2) You must establish the maximum mercury fuel input level (Mercuryinput) during the initial fuel analysis using the procedures in paragraphs (b)(2)(i) through (iii) of this section.

(i) You must determine the fuel type or fuel mixture that you could burn in your boiler or process heater that has the highest content of mercury.

(ii) During the compliance demonstration for mercury, you must determine the fraction of total heat input for each fuel burned (Qi) based on the fuel mixture that has the highest content of mercury, and the average mercury concentration of each fuel type burned (HGi).

(iii) You must establish a maximum mercury input level using Equation 8 of this section.

\[
\text{Mercuryinput} = \sum_{i=1}^{n} (HGi \times Qi) \quad (\text{Eq. 8})
\]

Where:

\[\text{Mercuryinput} = \text{Maximum amount of mercury entering the boiler or process heater through fuels burned in units of pounds per million Btu.}\]

\[\text{HGi} = \text{Arithmetic average concentration of mercury in fuel type, i, analyzed according to §63.7521, in units of pounds per million Btu.}\]

\[\text{Qi} = \text{Fraction of total heat input from fuel type, i, based on the fuel mixture that has the highest mercury content during the initial compliance test. If you do not burn multiple fuel types during the performance test, it is not necessary to determine the value of this term. Insert a value of ‘‘1’’ for Qi. For continuous compliance demonstration, the actual fraction of the fuel burned during the month should be used.}\]

\[n = \text{Number of different fuel types burned in your boiler or process heater for the mixture that has the highest content of mercury.}\]

(3) If you opt to comply with the alternative TSM limit, you must establish the maximum TSM fuel input (TSMinput) for solid or liquid fuels during the initial fuel analysis according to the procedures in paragraphs (b)(3)(i) through (iii) of this section.

(i) You must determine the fuel type or fuel mixture that you could burn in your boiler or process heater that has the highest content of TSM.

(ii) During the fuel analysis for TSM, you must determine the fraction of the total heat input for each fuel type burned (Qi) based on the fuel mixture that has the highest content of TSM, and the average TSM concentration of each fuel type burned (TSMi).

(iii) You must establish a maximum TSM input level using Equation 9 of this section.

\[
\text{TSMinput} = \sum_{i=1}^{n} (TSMi \times Qi) \quad (\text{Eq. 9})
\]

Where:

\[\text{TSMinput} = \text{Maximum amount of TSM entering the boiler or process heater through fuels burned in units of pounds per million Btu.}\]

\[\text{TSMi} = \text{Arithmetic average concentration of TSM in fuel type, i, analyzed according to §63.7521, in units of pounds per million Btu.}\]

\[\text{Qi} = \text{Fraction of total heat input from fuel type, i, based on the fuel mixture that has the highest content of TSM during the initial compliance test. If you do not burn multiple fuel types during the performance testing, it is not necessary to}\]
Environmental Protection Agency § 63.7530

determine the value of this term. Insert a value of “1” for Qi. For continuous
compliance demonstration, the actual fraction of the fuel burned during the
month should be used.
n = Number of different fuel types burned in
your boiler or process heater for the mix-
ture that has the highest content of
TSM.

(4) You must establish parameter oper-
ing limits according to paragraphs
(b)(4)(i) through (ix) of this section. As
indicated in Table 4 to this subpart,
you are not required to establish and
comply with the operating parameter
limits when you are using a CEMS to
monitor and demonstrate compliance
with the applicable emission limit for
that control device parameter.

(i) For a wet acid gas scrubber, you
must establish the minimum scrubber
effluent pH and liquid flow rate as de-
fined in §63.7575, as your operating lim-
its during the performance test during
which you demonstrate compliance with your applicable limit. If you use a
wet scrubber and you conduct separate
performance tests for HCl and mercury
emissions, you must establish one set
of minimum scrubber effluent pH, liq-
uid flow rate, and pressure drop oper-
ating limits. The minimum scrubber
effluent pH operating limit must be es-
tablished during the HCl performance
test. If you conduct multiple perform-
ance tests, you must set the minimum
liquid flow rate operating limit at the
higher of the minimum values estab-
lished during the performance tests.

(ii) For any particulate control de-
vice (e.g., ESP, particulate wet scrub-
ber, fabric filter) for which you use a
PM CPMS, you must establish your PM
CPMS operating limit and determine
compliance with it according to para-
graphs (b)(4)(ii)(A) through (F) of this
section.

(A) Determine your operating limit
as the average PM CPMS output value
recorded during the most recent per-
formance test run demonstrating com-
pliance with the filterable PM emission
limit. If your PM CPMS output value
recorded during the most recent per-
formance test run demonstrates compliance below 75 percent of the
emission limit you must verify an existing or establish a
new operating limit after each re-
peated performance test. You must re-
peat the performance test annually and
reassess and adjust the site-specific op-
erating limit in accordance with the results of the performance test.

(1) Your PM CPMS must provide a 4-
20 milliamp output and the establish-
ment of its relationship to manual ref-
erence method measurements must be
determined in units of milliamps.

(2) Your PM CPMS operating range
must be capable of reading PM con-
centrations from zero to a level equiva-
 lent to at least two times your allow-
able emission limit. If your PM CPMS
is an auto-ranging instrument capable
of multiple scales, the primary range
of the instrument must be capable of
reading PM concentration from zero to
a level equivalent to two times your al-
lowable emission limit.

(3) During the initial performance
test or any such subsequent perform-
ance test that demonstrates compli-
ance with the PM limit, record and av-
erage all milliamp output values from
the PM CPMS for the periods cor-
responding to the compliance test runs
e.g., average all your PM CPMS out-
put values for three corresponding 2-
hour Method 51 test runs).

(B) If the average of your three PM
performance test runs are below 75 per-
cent of your PM emission limit, you
must calculate an operating limit by
establishing a relationship of PM
CPMS signal to PM concentration
using the PM CPMS instrument zero,
the average PM CPMS values cor-
responding to the three compliance
test runs, and the average PM con-
centration from the Method 5 or per-
formance test with the procedures in
paragraphs (b)(4)(ii)(B)(1) through (4)
of this section.

(1) Determine your instrument zero
output with one of the following proce-
dures:

(i) Zero point data for in-situ instru-
ments should be obtained by removing
the instrument from the stack and
monitoring ambient air on a test
bench.

(ii) Zero point data for extractive in-
struments should be obtained by re-
moving the extractive probe from the
stack and drawing in clean ambient
air.

(iii) The zero point may also be estab-
lished by performing manual reference
§ 63.7530

method measurements when the flue gas is free of PM emissions or contains very low PM concentrations (e.g., when your process is not operating, but the fans are operating or your source is combusting only natural gas) and plotting these with the compliance data to find the zero intercept.

(iv) If none of the steps in paragraphs (b)(4)(ii)(B)(1) through (iii) of this section are possible, you must use a zero output value provided by the manufacturer.

(2) Determine your PM CPMS instrument average in milliamps, and the average of your corresponding three PM compliance test runs, using equation 10.

\[ \bar{X} = \frac{1}{n} \sum_{i=1}^{n} X_i \quad \bar{Y} = \frac{1}{n} \sum_{i=1}^{n} Y_i \]  

(Eq. 10)

Where:

- \( X_i \) = the PM CPMS data points for the three runs constituting the performance test,
- \( Y_i \) = the PM concentration value for the three runs constituting the performance test, and
- \( n \) = the number of data points.

(3) With your instrument zero expressed in milliamps, your three run average PM CPMS milliamp value, and your three run average PM concentration from your three compliance tests, determine a relationship of lb/MMBtu per milliamp with equation 11.

\[ R = \frac{Y_1}{(X_1 - z)} \]  

(Eq. 11)

Where:

- \( R \) = the relative lb/MMBtu per milliamp for your PM CPMS,
- \( Y_1 \) = the three run average lb/MMBtu PM concentration,
- \( X_1 \) = the three run average milliamp output from your PM CPMS, and
- \( z \) = the milliamp equivalent of your instrument zero determined from (B)(i).

(4) Determine your source specific 30-day rolling average operating limit using the lb/MMBtu per milliamp value from Equation 11 in equation 12, below. This sets your operating limit at the PM CPMS output value corresponding to 75 percent of your emission limit.

\[ O_l = z + \frac{0.75(L)}{R} \]  

(Eq. 12)

Where:

- \( O_l \) = the operating limit for your PM CPMS on a 30-day rolling average, in milliamps,
- \( L \) = your source emission limit expressed in lb/MMBtu,
- \( z \) = your instrument zero in milliamps, determined from (B)(i), and
- \( R \) = the relative lb/MMBtu per milliamp for your PM CPMS, from Equation 11.

(C) If the average of your three PM compliance test runs is at or above 75 percent of your PM emission limit you must determine your 30-day rolling average operating limit by averaging the PM CPMS milliamp output corresponding to your three PM performance test runs that demonstrate compliance with the emission limit using equation 13 and you must submit all compliance test and PM CPMS data according to the reporting requirements.
in paragraph (b)(4)(ii)(F) of this section.

\[ O_h = \frac{1}{n} \sum_{i=1}^{n} X_i \]  
(Eq. 13)

Where:
- \( X_i \) = the PM CPMS data points for all runs \( i \),
- \( n \) = the number of data points, and
- \( O_h \) = your site specific operating limit, in milliamps.

(D) To determine continuous compliance, you must record the PM CPMS output data for all periods when the process is operating and the PM CPMS is not out-of-control. You must demonstrate continuous compliance by using all quality-assured hourly average data collected by the PM CPMS for all operating hours to calculate the arithmetic average operating parameter in units of the operating limit (milliamps) on a 30-day rolling average basis, updated at the end of each new operating hour. Use Equation 14 to determine the 30-day rolling average.

\[ \text{30-day average} = \frac{\sum_{i=1}^{n} Hpvi}{n} \]  
(Eq. 14)

Where:
- \( 30\text{-day} \) = 30-day average.
- \( Hpvi \) = is the hourly parameter value for hour \( i \).
- \( n \) = is the number of valid hourly parameter values collected over the previous 30 operating days.

(E) Use EPA Method 5 of appendix A to part 60 of this chapter to determine PM emissions. For each performance test, conduct three separate runs under the conditions that exist when the affected source is operating at the highest load or capacity level reasonably expected to occur. Conduct each test run to collect a minimum sample volume specified in Tables 1, 2, or 11 through 13 to this subpart, as applicable, for determining compliance with a new source limit or an existing source limit. Calculate the average of the results from three runs to determine compliance. You need not determine the PM collected in the impingers ("back half") of the Method 5 particulate sampling train to demonstrate compliance with the PM standards of this subpart. This shall not preclude the permitting authority from requiring a determination of the "back half" for other purposes.

(F) For PM performance test reports used to set a PM CPMS operating limit, the electronic submission of the test report must also include the make and model of the PM CPMS instrument, serial number of the instrument, analytical principle of the instrument (e.g. beta attenuation), span of the instrument's primary analytical range, milliamp value equivalent to the instrument zero output, technique by which this zero value was determined, and the average milliamp signals corresponding to each PM compliance test run.

(iii) For a particulate wet scrubber, you must establish the minimum pressure drop and liquid flow rate as defined in \$63.7575, as your operating limits during the three-run performance test during which you demonstrate compliance with your applicable limit. If you use a wet scrubber and you conduct separate performance tests for PM and TSM emissions, you must establish

159
one set of minimum scrubber liquid flow rate and pressure drop operating limits. The minimum scrubber effluent pH operating limit must be established during the HCl performance test. If you conduct multiple performance tests, you must set the minimum liquid flow rate and pressure drop operating limits at the higher of the minimum values established during the performance tests.

(iv) For an electrostatic precipitator (ESP) operated with a wet scrubber, you must establish the minimum total secondary electric power input, as defined in §63.7575, as your operating limit during the three-run performance test during which you demonstrate compliance with your applicable limit. (These operating limits do not apply to ESP that are operated as dry controls without a wet scrubber.)

(v) For a dry scrubber, you must establish the minimum sorbent injection rate for each sorbent, as defined in §63.7575, as your operating limit during the three-run performance test during which you demonstrate compliance with your applicable limit.

(vi) For activated carbon injection, you must establish the minimum activated carbon injection rate, as defined in §63.7575, as your operating limit during the three-run performance test during which you demonstrate compliance with your applicable limit.

(vii) The operating limit for boilers or process heaters with fabric filters that demonstrate continuous compliance through bag leak detection systems is that a bag leak detection system be installed according to the requirements in §63.7525, and that each fabric filter must be operated such that the bag leak detection system alert is not activated more than 5 percent of the operating time during a 6-month period.

(viii) For a minimum oxygen level, if you conduct multiple performance tests, you must set the minimum oxygen level at the lower of the minimum values established during the performance tests.

(ix) The operating limit for boilers or process heaters that demonstrate continuous compliance with the HCl emission limit using a SO\textsubscript{2} CEMS is to install and operate the SO\textsubscript{2} according to the requirements in §63.7525(m) establish a maximum SO\textsubscript{2} emission rate equal to the highest hourly average SO\textsubscript{2} measurement during the most recent three-run performance test for HCl.

(c) If you elect to demonstrate compliance with an applicable emission limit through fuel analysis, you must conduct fuel analyses according to §63.7521 and follow the procedures in paragraphs (c)(1) through (5) of this section.

(1) If you burn more than one fuel type, you must determine the fuel mixture you could burn in your boiler or process heater that would result in the maximum emission rates of the pollutants that you elect to demonstrate compliance through fuel analysis.

(2) You must determine the 90th percentile confidence level fuel pollutant concentration of the composite samples analyzed for each fuel type using the one-sided t-statistic test described in Equation 15 of this section.

\[
P_{90} = \text{mean} + (SD \times t) \quad (\text{Eq. 15})
\]

Where:
- \(P_{90}\) = 90th percentile confidence level pollutant concentration, in pounds per million Btu.
- Mean = Arithmetic average of the fuel pollutant concentration in the fuel samples analyzed according to §63.7521, in units of pounds per million Btu.
- SD = Standard deviation of the mean of pollutant concentration in the fuel samples analyzed according to §63.7521, in units of pounds per million Btu. SD is calculated as the sample standard deviation divided by the square root of the number of samples.
- \(t\) = t distribution critical value for 90th percentile (t\text{0.90}) probability for the appropriate degrees of freedom (number of samples minus one) as obtained from a t-Distribution Critical Value Table.

(3) To demonstrate compliance with the applicable emission limit for HCl,
the HCl emission rate that you calculate for your boiler or process heater using Equation 16 of this section must not exceed the applicable emission limit for HCl.

\[ HCl = \sum_{i=1}^{n} (Ci90 \times Qi \times 1.028) \]  

(Eq. 16)

Where:
- \( HCl \) = HCl emission rate from the boiler or process heater in units of pounds per million Btu.
- \( Ci90 \) = 90th percentile confidence level concentration of chlorine in fuel type, \( i \), in units of pounds per million Btu as calculated according to Equation 15 of this section.
- \( Qi \) = Fraction of total heat input from fuel type, \( i \), based on the fuel mixture that has the highest content of chlorine. If you do not burn multiple fuel types, it is not necessary to determine the value of this term. Insert a value of “1” for \( Qi \). For continuous compliance demonstration, the actual fraction of the fuel burned during the month should be used.
- \( n \) = Number of different fuel types burned in your boiler or process heater for the mixture that has the highest content of chlorine.
- 1.028 = Molecular weight ratio of HCl to chlorine.

(4) To demonstrate compliance with the applicable emission limit for mercury, the mercury emission rate that you calculate for your boiler or process heater using Equation 17 of this section must not exceed the applicable emission limit for mercury.

\[ Mercury = \sum_{i=1}^{n} (Hgi90 \times Qi) \]  

(Eq. 17)

Where:
- \( Mercury \) = Mercury emission rate from the boiler or process heater in units of pounds per million Btu.
- \( Hgi90 \) = 90th percentile confidence level concentration of mercury in fuel, \( i \), in units of pounds per million Btu as calculated according to Equation 15 of this section.
- \( Qi \) = Fraction of total heat input from fuel type, \( i \), based on the fuel mixture that has the highest mercury content. If you do not burn multiple fuel types, it is not necessary to determine the value of this term. Insert a value of “1” for \( Qi \). For continuous compliance demonstration, the actual fraction of the fuel burned during the month should be used.
- \( n \) = Number of different fuel types burned in your boiler or process heater for the mixture that has the highest mercury content.

(5) To demonstrate compliance with the applicable emission limit for TSM for solid or liquid fuels, the TSM emission rate that you calculate for your boiler or process heater from solid fuels using Equation 18 of this section must not exceed the applicable emission limit for TSM.

\[ Metals = \sum_{i=1}^{n} (TSM90i \times Qi) \]  

(Eq. 18)

Where:
- \( Metals \) = TSM emission rate from the boiler or process heater in units of pounds per million Btu.
- \( TSM90i \) = 90th percentile confidence level concentration of TSM in fuel type, \( i \), in units of pounds per million Btu as calculated according to Equation 15 of this section.
- \( Qi \) = Fraction of total heat input from fuel type, \( i \), based on the fuel mixture that has the highest mercury content. If you do not burn multiple fuel types, it is not necessary to determine the value of this term. Insert a value of “1” for \( Qi \). For continuous compliance demonstration, the actual fraction of the fuel burned during the month should be used.
§ 63.7533 Can I use efficiency credits earned from implementation of energy conservation measures to comply with this subpart?

(a) If you elect to comply with the alternative equivalent output-based emission limits, instead of the heat input-based limits listed in Table 2 to this subpart, and you want to take credit for implementing energy conservation measures identified in an energy assessment, you may demonstrate compliance using efficiency credits according to the procedures in paragraphs (b) through (f) of this section. Owners or operators using this compliance approach must establish an emissions benchmark, calculate and document the efficiency credits, develop an Implementation Plan, comply with the general reporting requirements, and apply the efficiency credit according to the procedures in paragraphs (b) through (f) of this section. You cannot use this compliance approach for a new or reconstructed affected boiler. Additional guidance from the Department of Energy on efficiency credits is available at: http://www.epa.gov/ttn/atw/boiler/boilerpg.html.

(b) [Reserved]

(e) You must include with the Notification of Compliance Status a signed certification that either the energy assessment was completed according to Table 3 to this subpart, and that the assessment is an accurate depiction of your facility at the time of the assessment, or that the maximum number of on-site technical hours specified in the definition of energy assessment applicable to the facility has been expended.

(f) You must submit the Notification of Compliance Status containing the results of the initial compliance demonstration according to the requirements in §63.7545(e).

(g) If you elect to demonstrate that a gaseous fuel meets the specifications of another gas fuel as defined in §63.7375, you must conduct an initial fuel specification analyses according to §63.7521(f) through (l) and according to the frequency listed in §63.7540(c) and maintain records of the results of the testing as outlined in §63.7535(g). For samples where the initial mercury specification has not been exceeded, you will include a signed certification with the Notification of Compliance Status that the initial fuel specification test meets the gas specification outlined in the definition of other gas fuels.

(h) If you own or operate a unit subject to emission limits in Tables 1 or 2 or 11 through 13 to this subpart, you must meet the work practice standard according to Table 3 of this subpart. During startup and shutdown, you must only follow the work practice standard according to items 5 and 6 of Table 3 of this subpart.

(i) If you opt to comply with the alternative SO₂ CEMS operating limit in Tables 4 and 8 to this subpart, you may do so only if your affected boiler or process heater:

1. Has a system using wet scrubber or dry sorbent injection and SO₂ CEMS installed on the unit; and

2. At all times, you operate the wet scrubber or dry sorbent injection for acid gas control on the unit consistent with §63.7500(a)(3); and

3. You establish a unit-specific maximum SO₂ operating limit by collecting the maximum hourly SO₂ emission rate on the SO₂ CEMS during the paired 3-run test for HCl. The maximum SO₂ operating limit is equal to the highest hourly average SO₂ concentration measured during the HCl performance test.

(b) For each existing affected boiler for which you intend to apply emissions credits, establish a benchmark from which emission reduction credits may be generated by determining the actual annual fuel heat input to the affected boiler before initiation of an energy conservation activity to reduce energy demand (i.e., fuel usage) according to paragraphs (b)(1) through (4) of this section. The benchmark shall be expressed in trillion Btu per year heat input.

(1) The benchmark from which efficiency credits may be generated shall be determined by using the most representative, accurate, and reliable process available for the source. The benchmark shall be established for a one-year period before the date that an energy demand reduction occurs, unless it can be demonstrated that a different time period is more representative of historical operations.

(2) Determine the starting point from which to measure progress. Inventory all fuel purchased and generated on-site (off-gases, residues) in physical units (MMBtu, million cubic feet, etc.).

(3) Document all uses of energy from the affected boiler. Use the most recent data available.

(4) Collect non-energy related facility and operational data to normalize, if necessary, the benchmark to current operations, such as building size, operating hours, etc. If possible, use actual data that are current and timely rather than estimated data.

(c) Efficiency credits can be generated if the energy conservation measures were implemented after January 1, 2008 and if sufficient information is available to determine the appropriate value of credits.

(1) The following emission points cannot be used to generate efficiency credits:

(i) Energy conservation measures implemented on or before January 1, 2008, unless the level of energy demand reduction is increased after January 1, 2008, in which case credit will be allowed only for change in demand reduction achieved after January 1, 2008.

(ii) Efficiency credits on shut-down boilers. Boilers that are shut down cannot be used to generate credits unless the facility provides documentation linking the permanent shutdown to energy conservation measures identified in the energy assessment. In this case, the benchmark shall be established for the affected boiler to which the credits from the shutdown will be applied must be revised to include the benchmark established for the shutdown boiler.

(2) For all points included in calculating emissions credits, the owner or operator shall:

(i) Calculate annual credits for all energy demand points. Use Equation 19 to calculate credits. Energy conservation measures that meet the criteria of paragraph (c)(1) of this section shall not be included, except as specified in paragraph (c)(1)(i) of this section.

(3) Credits are generated by the difference between the benchmark that is established for each affected boiler, and the actual energy demand reductions from energy conservation measures implemented after January 1, 2008. Credits shall be calculated using Equation 19 of this section as follows:

\[
ECredits = \sum_{i=1}^{n} EIS\text{actual} + EI_{baseline} \quad (Eq. 19)
\]

Where:

\( ECredits \) = Energy Input Savings for all energy conservation measures implemented for an affected boiler, expressed as a decimal fraction of the baseline energy input.

\( EIS\text{actual} \) = Energy Input Savings for each energy conservation measure, i, implemented for an affected boiler, million Btu per year.

\( EI_{baseline} \) = Energy Input baseline for the affected boiler, million Btu per year.
§ 63.7535

n = Number of energy conservation measures included in the efficiency credit for the affected boiler.

(i)(ii) [Reserved]

(d) The owner or operator shall develop, and submit for approval upon request by the Administrator, an Implementation Plan containing all of the information required in this paragraph for all boilers to be included in an efficiency credit approach. The Implementation Plan shall identify all existing affected boilers to be included in applying the efficiency credits. The Implementation Plan shall include a description of the energy conservation measures implemented and the energy savings generated from each measure and an explanation of the criteria used for determining that savings. If requested, you must submit the implementation plan for efficiency credits to the Administrator for review and approval no later than 180 days before the date on which the facility intends to demonstrate compliance using the efficiency credit approach.

(e) The emissions rate as calculated using Equation 20 of this section from each existing boiler participating in the efficiency credit option must be in compliance with the limits in Table 2 to this subpart at all times the affected unit is subject to numeric emission limits, following the compliance date specified in §63.7495.

(f) You must use Equation 20 of this section to demonstrate initial compliance by demonstrating that the emissions from the affected boiler participating in the efficiency credit compliance approach do not exceed the emission limits in Table 2 to this subpart.

\[ E_{\text{adj}} = E_m \times (1 - \text{ECredits} ) \quad (\text{Eq. 20}) \]

Where:

- \( E_{\text{adj}} \) = Emission level adjusted by applying the efficiency credits earned, lb per million Btu steam output (or lb per MWh) for the affected boiler.
- \( E_m \) = Emissions measured during the performance test, lb per million Btu steam output (or lb per MWh) for the affected boiler.
- \( \text{ECredits} \) = Efficiency credits from Equation 19 for the affected boiler.

(g) As part of each compliance report submitted as required under §63.7530, you must include documentation that the energy conservation measures implemented continue to generate the credit for use in demonstrating compliance with the emission limits.


CONTINUOUS COMPLIANCE REQUIREMENTS

§ 63.7535 Is there a minimum amount of monitoring data I must obtain?

(a) You must monitor and collect data according to this section and the site-specific monitoring plan required by §63.7530(d).

(b) You must operate the monitoring system and collect data at all required intervals at all times that each boiler or process heater is operating and compliance is required, except for periods of monitoring system malfunctions or out-of-control periods (see §63.8(c)(7) of this part), and required monitoring system quality assurance or control activities, including, as applicable, calibration checks, required zero and span adjustments, and scheduled CMS maintenance as defined in your site-specific monitoring plan. A monitoring system malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring system to provide valid data. Monitoring system failures that are caused in part by poor maintenance or careless operation are not malfunctions. You are required to complete monitoring system repairs in response to monitoring system malfunctions or out-of-control periods and to return the monitoring system to operation as expeditiously as practicable.

(c) You may not use data recorded during periods of startup and shutdown, monitoring system malfunctions or out-of-control periods, repairs associated with monitoring system malfunctions or out-of-control periods, or
Environmental Protection Agency  

§ 63.7540  

How do I demonstrate continuous compliance with the emission limitations, fuel specifications and work practice standards?

(a) You must demonstrate continuous compliance with each emission limit in Tables 1 and 2 or 11 through 13 to this subpart, the work practice standards in Table 3 to this subpart, and the operating limits in Table 4 to this subpart that applies to you according to the methods specified in Table 8 to this subpart and paragraphs (a)(1) through (19) of this section.

(1) Following the date on which the initial compliance demonstration is completed or is required to be completed under §§63.7 and 63.7510, whichever date comes first, operation above the established maximum or below the established minimum operating limits shall constitute a deviation of established operating limits listed in Table 4 of this subpart except during performance tests conducted to determine compliance with the emission limits or to establish new operating limits. Operating limits must be confirmed or re-established during performance tests.

(b) You must keep accurate records of the type and amount of all fuels burned in each boiler or process heater during the reporting period to demonstrate that all fuel types and mixtures of fuels burned would result in either of the following:

(i) Equal to or lower emissions of HCl, mercury, and TSM than the applicable emission limit for each pollutant, if you demonstrate compliance through fuel analysis.

(ii) Equal to or lower fuel input of chlorine, mercury, and TSM than the maximum values calculated during the last performance test, if you demonstrate compliance through performance testing.

(3) If you demonstrate compliance with an applicable HCl emission limit through fuel analysis for a solid or liquid fuel and you plan to burn a new type of solid or liquid fuel, you must recalculate the HCl emission rate using Equation 16 of §63.7530 according to paragraphs (a)(3)(i) through (iii) of this section. You are not required to conduct fuel analyses for the fuels described in §63.7510(a)(2)(i) through (iii).

(i) You must determine the chlorine concentration for any new fuel type in units of pounds per million Btu, based on supplier data or your own fuel analysis, according to the provisions in your site-specific fuel analysis plan developed according to §63.7521(b).

(ii) You must determine the new mixture of fuels that will have the highest content of chlorine.
(iii) Recalculate the HCl emission rate from your boiler or process heater under these new conditions using Equation 16 of §63.7530. The recalculated HCl emission rate must be less than the applicable emission limit.

(4) If you demonstrate compliance with an applicable HCl emission limit through performance testing and you plan to burn a new type of fuel or a new mixture of fuels, you must recalculate the maximum chlorine input using Equation 7 of §63.7530. If the results of recalculating the maximum chlorine input using Equation 7 of §63.7530 are greater than the maximum chlorine input level established during the previous performance test, then you must conduct a new performance test within 60 days of burning the new fuel type or fuel mixture according to the procedures in §63.7520 to demonstrate that the HCl emissions do not exceed the emission limit. You must also establish new operating limits based on this performance test according to the procedures in §63.7530(b). In recalculating the maximum chlorine input and establishing the new operating limits, you are not required to conduct fuel analyses for and include the fuels described in §63.7510(a)(2)(i) through (iii).

(5) If you demonstrate compliance with an applicable mercury emission limit through fuel analysis, and you plan to burn a new type of fuel, you must recalculate the mercury emission rate using Equation 17 of §63.7530 according to the procedures specified in paragraphs (a)(5)(i) through (iii) of this section. You are not required to conduct fuel analyses for the fuels described in §63.7510(a)(2)(i) through (iii). You may exclude the fuels described in §63.7510(a)(2)(i) through (iii) when recalculating the mercury emission rate.

(6) If you demonstrate compliance with an applicable mercury emission limit through performance testing, and you plan to burn a new type of fuel or a new mixture of fuels, you must recalculate the maximum mercury input using Equation 8 of §63.7530. If the results of recalculating the maximum mercury input using Equation 8 of §63.7530 are higher than the maximum mercury input level established during the previous performance test, then you must conduct a new performance test within 60 days of burning the new fuel type or fuel mixture according to the procedures in §63.7520 to demonstrate that the mercury emissions do not exceed the emission limit. You must also establish new operating limits based on this performance test according to the procedures in §63.7530(b). You are not required to conduct fuel analyses for the fuels described in §63.7510(a)(2)(i) through (iii) when recalculating the mercury emission rate.

(7) If your unit is controlled with a fabric filter, and you demonstrate continuous compliance using a bag leak detection system, you must initiate corrective action within 1 hour of a bag leak detection system alert and complete corrective actions as soon as practical, and operate and maintain the fabric filter system such that the periods which would cause an alert are no more than 5 percent of the operating time during a 6-month period. You must also keep records of the date, time, and duration of each alert, the time corrective action was initiated and completed, and a brief description of the cause of the alert and the corrective action taken. You must also record the percent of the operating time during each 6-month period that the conditions exist for an alert. In calculating this operating time percentage, if inspection of the fabric filter demonstrates that no corrective action is required, no alert time is counted. If corrective action is required, each alert shall be counted as a minimum of 1 hour. If you take longer than 1 hour...
to initiate corrective action, the alert time shall be counted as the actual amount of time taken to initiate corrective action.

(8) To demonstrate compliance with the applicable alternative CO CEMS emission limit listed in Tables 1, 2, or 11 through 13 to this subpart, you must meet the requirements in paragraphs (a)(8)(i) through (iv) of this section.

(i) Continuously monitor CO according to §§63.7525(a) and 63.7535.

(ii) Maintain a CO emission level below or at your applicable alternative CO CEMS-based standard in Tables 1 or 2 or 11 through 13 to this subpart at all times the affected unit is subject to numeric emission limits.

(iii) Keep records of CO levels according to §63.7555(b).

(iv) You must record and make available upon request results of CO CEMS performance audits, dates and duration of periods when the CO CEMS is out of control to completion of the corrective actions necessary to return the CO CEMS to operation consistent with your site-specific monitoring plan.

(9) The owner or operator of a boiler or process heater using a PM CPMS or a PM CEMS to meet requirements of this subpart shall install, certify, operate, and maintain the PM CPMS or PM CEMS in accordance with your site-specific monitoring plan as required in §63.7505(d).

(10) If your boiler or process heater has a heat input capacity of 10 million Btu per hour or greater, you must conduct an annual tune-up of the boiler or process heater to demonstrate continuous compliance as specified in paragraphs (a)(10)(i) through (vi) of this section. You must conduct the tune-up while burning the type of fuel (or fuels in case of units that routinely burn a mixture) that provided the majority of the heat input to the boiler or process heater over the 12 months prior to the tune-up. This frequency does not apply to limited-use boilers and process heaters, as defined in §63.7575, or units with continuous oxygen trim systems that maintain an optimum air to fuel ratio.

(i) As applicable, inspect the burner, and clean or replace any components of the burner as necessary (you may perform the burner inspection any time prior to the tune-up or delay the burner inspection until the next scheduled unit shutdown). Units that produce electricity for sale may delay the burner inspection until the first outage, not to exceed 36 months from the previous inspection. At units where entry into a piece of process equipment or into a storage vessel is required to complete the tune-up inspections, inspections are required only during planned entries into the storage vessel or process equipment;

(ii) Inspect the flame pattern, as applicable, and adjust the burner as necessary to optimize the flame pattern. The adjustment should be consistent with the manufacturer’s specifications, if available;

(iii) Inspect the system controlling the air-to-fuel ratio, as applicable, and ensure that it is correctly calibrated and functioning properly (you may delay the inspection until the next scheduled unit shutdown). Units that produce electricity for sale may delay the inspection until the first outage, not to exceed 36 months from the previous inspection;

(iv) Optimize total emissions of CO. This optimization should be consistent with the manufacturer’s specifications, if available, and with any NOx requirement to which the unit is subject;

(v) Measure the concentrations in the effluent stream of CO in parts per million, by volume, and oxygen in volume percent, before and after the adjustments are made. Measurements may be taken using a portable CO analyzer; and

(vi) Maintain on-site and submit, if requested by the Administrator, a report containing the information in paragraphs (a)(10)(vi)(A) through (C) of this section,

(A) The concentrations of CO in the effluent stream in parts per million, by volume, and oxygen in volume percent, measured at high fire or typical operating load, before and after the tune-up of the boiler or process heater;

(B) A description of any corrective actions taken as a part of the tune-up; and

(C) The type and amount of fuel used over the 12 months prior to the tune-up.
up, but only if the unit was physically and legally capable of using more than one type of fuel during that period. Units sharing a fuel meter may estimate the fuel used by each unit.

(11) If your boiler or process heater has a heat input capacity of less than 10 million Btu per hour (except as specified in paragraph (a)(12) of this section), you must conduct a biennial tune-up of the boiler or process heater as specified in paragraphs (a)(10)(i) through (vi) of this section to demonstrate continuous compliance.

(12) If your boiler or process heater has a continuous oxygen trim system that maintains an optimum air to fuel ratio, or a heat input capacity of less than or equal to 5 million Btu per hour and the unit is in the units designed to burn gas 1; units designed to burn gas 2 (other); or units designed to burn light liquid subcategories, or meets the definition of limited-use boiler or process heater in §63.7575, you must conduct a tune-up of the boiler or process heater every 5 years as specified in paragraphs (a)(10)(i) through (vi) of this section to demonstrate continuous compliance. You may delay the burner inspection specified in paragraph (a)(10)(i) of this section until the next scheduled or unscheduled unit shutdown, but you must inspect each burner at least once every 72 months. If an oxygen trim system is utilized on a unit without emission standards to reduce the tune-up frequency to once every 5 years, set the oxygen level no lower than the oxygen concentration measured during the most recent tune-up.

(13) If the unit is not operating on the required date for a tune-up, the tune-up must be conducted within 30 calendar days of startup.

(14) If you are using a CEMS measuring mercury emissions to meet requirements of this subpart you must install, certify, operate, and maintain the mercury CEMS as specified in paragraphs (a)(13)(i) and (ii) of this section. This option for an affected unit takes effect on the date a final performance specification for an HCl CEMS is published in the Federal Register or the date of approval of a site-specific monitoring plan.

(i) Operate the continuous emissions monitoring system in accordance with the applicable performance specification in 40 CFR part 60, appendix B. The duration of the performance test must be 30 operating days if you specified a 30 operating day basis in §63.7545(e)(2)(iii) for mercury CEMS or it must be 720 hours if you specified a 720 hour basis in §63.7545(e)(2)(iii) for mercury CEMS. For each day in which the unit operates, you must obtain hourly mercury concentration data, and stack gas volumetric flow rate data.

(ii) If you are using a mercury CEMS, you must install, operate, calibrate, and maintain an instrument for continuously measuring and recording the mercury mass emissions rate to the atmosphere according to the requirements of performance specifications 6 and 12A of 40 CFR part 60, appendix B, and quality assurance procedure 6 of 40 CFR part 60, appendix F.

(15) If you are using a CEMS to measure HCl emissions to meet requirements of this subpart, you must install, certify, operate, and maintain the HCl CEMS as specified in paragraphs (a)(15)(i) and (ii) of this section. This option for an affected unit takes effect on the date a final performance specification for an HCl CEMS is published in the Federal Register or the date of approval of a site-specific monitoring plan.

(i) Operate the continuous emissions monitoring system in accordance with the applicable performance specification in 40 CFR part 60, appendix B. The duration of the performance test must be 30 operating days if you specified a 30 operating day basis in §63.7545(e)(2)(iii) for HCl CEMS or it must be 720 hours if you specified a 720 hour basis in §63.7545(e)(2)(iii) for HCl CEMS. For each day in which the unit operates, you must obtain hourly HCl concentration data, and stack gas volumetric flow rate data.

(ii) If you are using a HCl CEMS, you must install, operate, calibrate, and maintain an instrument for continuously measuring and recording the HCl mass emissions rate to the atmosphere according to the requirements of the applicable performance specification of 40 CFR part 60, appendix B, and the quality assurance procedures of 40 CFR part 60, appendix F.

(16) If you demonstrate compliance with an applicable TSM emission limit through performance testing, and you
Environmental Protection Agency

§ 63.7540

plan to burn a new type of fuel or a new mixture of fuels, you must recalculate the maximum TSM input using Equation 9 of § 63.7530. If the results of recalculating the maximum TSM input using Equation 9 of § 63.7530 are higher than the maximum total selected input level established during the previous performance test, then you must conduct a new performance test within 60 days of burning the new fuel type or fuel mixture according to the procedures in § 63.7520 to demonstrate that the TSM emissions do not exceed the emission limit. You must also establish new operating limits based on this performance test according to the procedures in § 63.7530(b). You are not required to conduct fuel analyses for the fuels described in § 63.7510(a)(2)(i) through (iii) when recalculating the TSM emission rate.

(17) If you demonstrate compliance with an applicable TSM emission limit through fuel analysis for solid or liquid fuels, and you plan to burn a new type of fuel, you must recalculate the TSM emission rate using Equation 18 of § 63.7530 according to the procedures specified in paragraphs (a)(5)(i) through (iii) of this section. You are not required to conduct fuel analyses for the fuels described in § 63.7510(a)(2)(i) through (iii) when recalculating the TSM emission rate.

(i) You must determine the TSM concentration for any new fuel type in units of pounds per million Btu, based on supplier data or your own fuel analysis, according to the provisions in your site-specific fuel analysis plan developed according to § 63.7521(b).

(ii) You must determine the new mixture of fuels that will have the highest content of TSM.

(iii) Recalculate the TSM emission rate from your boiler or process heater under these new conditions using Equation 18 of § 63.7530. The recalculated TSM emission rate must be less than the applicable emission limit.

(18) If you demonstrate continuous PM emissions compliance with a PM CPMS you will use a PM CPMS to establish a site-specific operating limit corresponding to the results of the performance test demonstrating compliance with the PM limit. You will conduct your performance test using the test method criteria in Table 5 of this subpart. You will use the PM CPMS to demonstrate continuous compliance with this operating limit. You must repeat the performance test annually and reassess and adjust the site-specific operating limit in accordance with the results of the performance test.

(i) To determine continuous compliance, you must record the PM CPMS output data for all periods when the process is operating and the PM CPMS is not out-of-control. You must demonstrate continuous compliance by using all quality-assured hourly average data collected by the PM CPMS for all operating hours to calculate the arithmetic average operating parameter in units of the operating limit (milliamps) on a 30-day rolling average basis.

(ii) For any deviation of the 30-day rolling PM CPMS average value from the established operating parameter limit, you must:

(A) Within 48 hours of the deviation, visually inspect the air pollution control device (APCD);

(B) If inspection of the APCD identifies the cause of the deviation, take corrective action as soon as possible and return the PM CPMS measurement to within the established value; and

(C) Within 30 days of the deviation or at the time of the annual compliance test, whichever comes first, conduct a PM emissions compliance test to determine compliance with the PM emissions limit and to verify or re-establish the CPMS operating limit. You are not required to conduct additional testing for any deviations that occur between the time of the original deviation and the PM emissions compliance test required under this paragraph.

(iii) PM CPMS deviations from the operating limit leading to more than four required performance tests in a 12-month operating period constitute a separate violation of this subpart.

(19) If you choose to comply with the PM filterable emissions limit by using PM CEMS you must install, certify, operate, and maintain a PM CEMS and record the output of the PM CEMS as
specified in paragraphs (a)(19)(i) through (vii) of this section. The compliance limit will be expressed as a 30-day rolling average of the numerical emissions limit value applicable for your unit in Tables 1 or 2 or 11 through 13 of this subpart.

(i) Install and certify your PM CEMS according to the procedures and requirements in Performance Specification 11—Specifications and Test Procedures for Particulate Matter Continuous Emission Monitoring Systems at Stationary Sources in Appendix B to part 60 of this chapter, using test criteria outlined in Table V of this rule. The reportable measurement output from the PM CEMS must be expressed in units of the applicable emissions limit (e.g., lb/MMBtu, lb/MWh).

(ii) Operate and maintain your PM CEMS according to the procedures and requirements in Procedure 2—Quality Assurance Requirements for Particulate Matter Continuous Emission Monitoring Systems at Stationary Sources in Appendix F to part 60 of this chapter.

(A) You must conduct the relative response audit (RRA) for your PM CEMS at least once annually.

(B) You must conduct the relative correlation audit (RCA) for your PM CEMS at least once every 3 years.

(iii) Collect PM CEMS hourly average output data for all boiler operating hours except as indicated in paragraph (v) of this section.

(iv) Calculate the arithmetic 30-day rolling average of all of the hourly average PM CEMS output data collected during all nonexempt boiler or process heater operating hours.

(v) You must collect data using the PM CEMS at all times the unit is operating and at the intervals specified this paragraph (a), except for periods of monitoring system malfunctions, repairs associated with monitoring system malfunctions, or required monitoring system quality assurance or control activities conducted during monitoring system malfunctions in calculations and report any such periods in your annual deviation report;

(B) Any data collected during periods when the monitoring system is out of control as specified in your site-specific monitoring plan, repairs associated with periods when the monitoring system is out of control, or required monitoring system quality assurance or control activities conducted during out of control periods in calculations used to report emissions or operating levels and report any such periods in your annual deviation report;

(C) Any data recorded during periods of startup or shutdown.

(vii) You must record and make available upon request results of PM CEMS system performance audits, dates and duration of periods when the PM CEMS is out of control to completion of the corrective actions necessary to return the PM CEMS to operation consistent with your site-specific monitoring plan.

(b) You must report each instance in which you did not meet each emission limit and operating limit in Tables 1 through 4 or 11 through 13 to this subpart that apply to you. These instances are deviations from the emission limits or operating limits, respectively, in this subpart. These deviations must be reported according to the requirements in §63.7550.

(c) If you elected to demonstrate that the unit meets the specification for mercury for the unit designed to burn gas 1 subcategory, you must follow the sampling frequency specified in paragraphs (c)(1) through (4) of this section and conduct this sampling according to the procedures in §63.7521(f) through (i).

(1) If the initial mercury constituents in the gaseous fuels are measured to be equal to or less than half of the mercury specification as defined in §63.7575, you do not need to conduct further sampling.

(2) If the initial mercury constituents are greater than half but equal to or less than 75 percent of the mercury specification as defined in §63.7575, you
will conduct semi-annual sampling. If 6 consecutive semi-annual fuel analyses demonstrate 50 percent or less of the mercury specification, you do not need to conduct further sampling. If any semi-annual sample exceeds 75 percent of the mercury specification, you must return to monthly sampling for that fuel, until 12 months of fuel analyses again are less than 75 percent of the compliance level.

(3) If the initial mercury constituents are greater than 75 percent of the mercury specification as defined in §63.7575, you will conduct monthly sampling. If 12 consecutive monthly fuel analyses demonstrate 75 percent or less of the mercury specification, you may decrease the fuel analysis frequency to semi-annual for that fuel.

(4) If the initial sample exceeds the mercury specification as defined in §63.7575, each affected boiler or process heater combusting this fuel is not part of the unit designed to burn gas 1 subcategory and must be in compliance with the emission and operating limits for the appropriate subcategory. You may elect to conduct additional monthly sampling while complying with these emissions and operating limits to demonstrate that the fuel qualifies as another gas 1 fuel. If 12 consecutive monthly fuel analyses samples are at or below the mercury specification as defined in §63.7575, each affected boiler or process heater combusting the fuel can elect to switch back into the unit designed to burn gas 1 subcategory until the mercury specification is exceeded.

(d) For startup and shutdown, you must meet the work practice standards according to items 5 and 6 of Table 3 of this subpart.


§63.7541 How do I demonstrate continuous compliance under the emissions averaging provision?

(a) Following the compliance date, the owner or operator must demonstrate compliance with this subpart on a continuous basis by meeting the requirements of paragraphs (a)(1) through (5) of this section.

(1) For each calendar month, demonstrate compliance with the average weighted emissions limit for the existing units participating in the emissions averaging option as determined in §63.7522(f) and (g).

(2) You must maintain the applicable opacity limit according to paragraphs (a)(2)(i) and (ii) of this section.

(i) For each group of units participating in the emissions averaging option that is equipped with a dry control system and not vented to a common stack, maintain opacity at or below the applicable limit.

(ii) For each group of units participating in the emissions averaging option where each unit in the group is equipped with a dry control system and vented to a common stack that does not receive emissions from non-affected units, maintain opacity at or below the applicable limit at the common stack.

(3) For each existing unit participating in the emissions averaging option that is equipped with a wet scrubber, maintain the 30-day rolling average parameter values at or above the operating limits established during the most recent performance test.

(4) For each existing unit participating in the emissions averaging option that has an approved alternative operating parameter, maintain the 30-day rolling average parameter values consistent with the approved monitoring plan.

(5) For each existing unit participating in the emissions averaging option venting to a common stack configuration containing affected units from other subcategories, maintain the appropriate operating limit for each unit as specified in Table 4 to this subpart that applies.

(d) For startup and shutdown, you must meet the work practice standards according to items 5 and 6 of Table 3 of this subpart.


§63.7545 What notifications must I submit and when?

(a) You must submit to the Administrator all of the notifications in §§63.7(b) and (c), 63.8(e), (f)(4) and (6),
and 63.9(b) through (h) that apply to you by the dates specified.

(b) As specified in §63.9(b)(2), if you startup your affected source before January 31, 2013, you must submit an Initial Notification not later than 120 days after January 31, 2013.

(c) As specified in §63.9(b)(4) and (5), if you startup your new or reconstructed affected source on or after January 31, 2013, you must submit an Initial Notification not later than 15 days after the actual date of startup of the affected source.

(d) 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.

(e) If you are required to conduct an initial compliance demonstration as specified in §63.7530, you must submit a Notification of Compliance Status according to §63.9(h)(2)(ii). For the initial compliance demonstration for each boiler or process heater, you must submit the Notification of Compliance Status, including all performance test results and fuel analyses, before the close of business on the 60th day following the completion of all performance test and/or other initial compliance demonstrations for all boiler or process heaters at the facility according to §63.10(d)(2). The Notification of Compliance Status report must contain all the information specified in paragraphs (e)(1) through (8) of this section, as applicable. If you are not required to conduct an initial compliance demonstration as specified in §63.7530(a), the Notification of Compliance Status must only contain the information specified in paragraphs (e)(1) and (8) of this section and must be submitted within 60 days of the compliance date specified at §63.7495(b).

(1) A description of the affected unit(s) including identification of which subcategories the unit is in, the design heat input capacity of the unit, a description of the add-on controls used on the unit to comply with this subpart, description of the fuel(s) burned, including whether the fuel(s) were a secondary material determined by you or the EPA through a petition process to be a non-waste under §241.3 of this chapter, whether the fuel(s) were a secondary material processed from discarded non-hazardous secondary materials within the meaning of §241.3 of this chapter, and justification for the selection of fuel(s) burned during the compliance demonstration.

(2) Summary of the results of all performance tests and fuel analyses, and calculations conducted to demonstrate initial compliance including all established operating limits, and including:

(i) Identification of whether you are complying with the PM emission limit or the alternative TSM emission limit.

(ii) Identification of whether you are complying with the output-based emission limits or the heat input-based (i.e., lb/MMBtu or ppm) emission limits,

(iii) Identification of whether you are complying with the arithmetic mean of all valid hours of data from the previous 30 operating days or of the previous 720 hours. This identification shall be specified separately for each operating parameter.

(3) A summary of the maximum CO emission levels recorded during the performance test to show that you have met any applicable emission standard in Tables 1, 2, or 11 through 13 to this subpart, if you are not using a CO CEMS to demonstrate compliance.

(4) Identification of whether you plan to demonstrate compliance with each applicable emission limit through performance testing, a CEMS, or fuel analysis.

(5) Identification of whether you plan to demonstrate compliance by emissions averaging and identification of whether you plan to demonstrate compliance by using efficiency credits through energy conservation:

(i) If you plan to demonstrate compliance by emission averaging, report the emission level that was being achieved or the control technology employed on January 31, 2013.

(ii) [Reserved]

(6) A signed certification that you have met all applicable emission limits and work practice standards.

(7) If you had a deviation from any emission limit, work practice standard, or operating limit, you must also submit a description of the deviation, the
§ 63.7550 What reports must I submit and when?

(a) You must submit each report in Table 9 to this subpart that applies to your unit.

(b) Unless the EPA Administrator has approved a different schedule for submission of reports under §63.10(a), you must submit each report, according to paragraph (h) of this section, by the date in Table 9 to this subpart and according to the requirements in paragraphs (b)(1) through (4) of this section. For units that are subject only to a requirement to conduct subsequent annual, biennial, or 5-year tune-up according to §63.7540(a)(10), (11), or (12), respectively, and not subject to emission limits or Table 4 operating limits,
§ 63.7550  40 CFR Ch. 1 (7–1–16 Edition)

you may submit only an annual, biennial, or 5-year compliance report, as applicable, as specified in paragraphs (b)(1) through (4) of this section, instead of a semi-annual compliance report.

(1) The first semi-annual compliance report must cover the period beginning on the compliance date that is specified for each boiler or process heater in §63.7495 and ending on June 30 or December 31, whichever date is the first date that occurs at least 180 days after the compliance date that is specified for your source in §63.7495. If submitting an annual, biennial, or 5-year compliance report, the first compliance report must cover the period beginning on the compliance date that is specified for each boiler or process heater in §63.7495 and ending on December 31 within 1, 2, or 5 years, as applicable, after the compliance date that is specified for your source in §63.7495.

(2) The first semi-annual compliance report must be postmarked or submitted no later than July 31 or January 31, whichever date is the first date following the end of the first calendar half after the compliance date that is specified for each boiler or process heater in §63.7495. The first annual, biennial, or 5-year compliance report must be postmarked or submitted no later than January 31.

(3) Each subsequent semi-annual compliance report must cover the semiannual reporting period from January 1 through June 30 or the semi-annual reporting period from July 1 through December 31. Annual, biennial, and 5-year compliance reports must cover the applicable 1-, 2-, or 5-year periods from January 1 to December 31.

(4) Each subsequent semi-annual compliance report must be postmarked or submitted no later than July 31 or January 31, whichever date is the first date following the end of the semi-annual reporting period. Annual, biennial, and 5-year compliance reports must be postmarked or submitted no later than January 31.

(5) For each affected source that is subject to permitting regulations pursuant to part 70 or part 71 of this chapter, and if the permitting authority has established dates for submitting semi-annual reports pursuant to 70.6(a)(3)(iii)(A) or 71.6(a)(3)(ii)(A), you may submit the first and subsequent compliance reports according to the dates the permitting authority has established in the permit instead of according to the dates in paragraphs (b)(1) through (4) of this section.

(c) A compliance report must contain the following information depending on how the facility chooses to comply with the limits set in this rule.

(1) If the facility is subject to the requirements of a tune up you must submit a compliance report with the information in paragraphs (c)(5)(i) through (iii) of this section, (xiv) and (xvii) of this section, and paragraph (c)(5)(iv) of this section for limited-use boiler or process heater.

(2) If you are complying with the fuel analysis you must submit a compliance report with the information in paragraphs (c)(5)(i) through (iii), (vi), (x), (xi), (xii), (xv), (xvii), (xviii) and paragraph (d) of this section.

(3) If you are complying with the applicable emissions limit with performance testing you must submit a compliance report with the information in (c)(5)(i) through (iii), (vi), (vii), (viii), (ix), (x), (xii), (xiii), (xv), (xvii), (xviii) and paragraph (e) of this section.

(4) If you are complying with an emissions limit using a CMS the compliance report must contain the information required in paragraphs (c)(5)(i) through (iii), (v), (vi), (x), (xi) through (xiii), (xv) through (xviii), and paragraph (e) of this section.

(5)(i) Company and Facility name and address.

(ii) Process unit information, emissions limitations, and operating parameter limitations.

(iii) Date of report and beginning and ending dates of the reporting period.

(iv) The total operating time during the reporting period.

(v) If you use a CMS, including CEMS, COMS, or CPMS, you must include the monitoring equipment manufacturer(s) and model numbers and the date of the last CMS certification or audit.

(vi) The total fuel use by each individual boiler or process heater subject to an emission limit within the reporting period, including, but not limited to, a description of the fuel, whether
the fuel has received a non-waste determination by the EPA or your basis for concluding that the fuel is not a waste, and the total fuel usage amount with units of measure.

(vii) If you are conducting performance tests once every 3 years consistent with §63.7515(b) or (c), the date of the last 2 performance tests and a statement as to whether there have been any operational changes since the last performance test that could increase emissions.

(viii) A statement indicating that you burned no new types of fuel in an individual boiler or process heater subject to an emission limit. Or, if you did burn a new type of fuel and are subject to an HCl emission limit, you must submit the calculation of HCl input using Equation 7 of §63.7530 that demonstrates that your source is still within its maximum HCl input level established during the previous performance testing (for sources that demonstrate compliance through performance testing) or you must submit the calculation of HC1 emission rate using Equation 16 of §63.7530 that demonstrates that your source is still meeting the emission limit for HCl emissions (for boilers or process heaters that demonstrate compliance through fuel analysis). If you burned a new type of fuel and are subject to a mercury emission limit, you must submit the calculation of mercury input using Equation 8 of §63.7530, that demonstrates that your source is still within its maximum mercury input level established during the previous performance testing (for sources that demonstrate compliance through performance testing) or you must submit the calculation of mercury emission rate using Equation 17 of §63.7530 that demonstrates that your source is still meeting the emission limit for mercury emissions (for boilers or process heaters that demonstrate compliance through fuel analysis). If you burned a new type of fuel and are subject to a TSM emission limit, you must submit the calculation of TSM input using Equation 9 of §63.7530, that demonstrates that your source is still within its maximum TSM input level established during the previous performance testing (for sources that demonstrate compliance through performance testing) or you must submit the calculation of TSM emission rate using Equation 18 of §63.7530 that demonstrates that your source is still meeting the emission limit for TSM emissions (for boilers or process heaters that demonstrate compliance through fuel analysis).

(ix) If you wish to burn a new type of fuel in an individual boiler or process heater subject to an emission limit and you cannot demonstrate compliance with the maximum chlorine input operating limit using Equation 7 of §63.7530 or the maximum mercury input operating limit using Equation 8 of §63.7530, or the maximum TSM input operating limit using Equation 9 of §63.7530 you must include in the compliance report a statement indicating the intent to conduct a new performance test within 60 days of starting to burn the new fuel.

(x) A summary of any monthly fuel analyses conducted to demonstrate compliance according to §§63.7521 and 63.7530 for individual boilers or process heaters subject to emission limits, and any fuel specification analyses conducted according to §§63.7521(f) and 63.7530(g).

(xi) If there are no deviations from any emission limits or operating limits in this subpart that apply to you, a statement that there were no deviations from the emission limits or operating limits during the reporting period.

(xii) If there were no deviations from the monitoring requirements including no periods during which the CMSs, including CEMS, COMS, and CPMS, were out of control as specified in §63.8(c)(7), a statement that there were no deviations and no periods during which the CMS were out of control during the reporting period.

(xiii) If a malfunction occurred during the reporting period, the 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
§ 63.7550

actions taken by you during a malfunction of a boiler, process heater, or associated air pollution control device or CMS to minimize emissions in accordance with §63.7500(a)(3), including actions taken to correct the malfunction.

(xiv) Include the date of the most recent tune-up for each unit subject to only the requirement to conduct an annual, biennial, or 5-year tune-up according to §63.7540(a)(10), (11), or (12) respectively. Include the date of the most recent burner inspection if it was not done annually, biennially, or on a 5-year period and was delayed until the next scheduled or unscheduled unit shutdown.

(xv) If you plan to demonstrate compliance by emission averaging, certify the emission level achieved or the control technology employed is no less stringent than the level or control technology contained in the notification of compliance status in §63.7545(e)(5)(i).

(xvi) For each reporting period, the compliance reports must include all of the calculated 30 day rolling average values for CEMS (CO, HCl, SO₂, and mercury), 10 day rolling average values for CO CEMS when the limit is expressed as a 10 day instead of 30 day rolling average, and the PM CPMS data.

(xvii) Statement by a responsible official with that official’s name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report.

(xviii) For each instance of startup or shutdown include the information required to be monitored, collected, or recorded according to the requirements of §63.7555(d).

(d) For each deviation from an emission limit or operating limit in this subpart that occurs at an individual boiler or process heater where you are not using a CMS to comply with that emission limit or operating limit, or from the work practice standards for periods if startup and shutdown, the compliance report must additionally contain the information required in paragraphs (d)(1) through (3) of this section.

(1) A description of the deviation and which emission limit, operating limit, or work practice standard from which you deviated.

(2) Information on the number, duration, and cause of deviations (including unknown cause), as applicable, and the corrective action taken.

(3) If the deviation occurred during an annual performance test, provide the date the annual performance test was completed.

(e) For each deviation from an emission limit, operating limit, and monitoring requirement in this subpart occurring at an individual boiler or process heater where you are using a CMS to comply with that emission limit or operating limit, the compliance report must additionally contain the information required in paragraphs (e)(1) through (9) of this section. This includes any deviations from your site-specific monitoring plan as required in §63.7505(d).

(1) The date and time that each deviation started and stopped and description of the nature of the deviation (i.e., what you deviated from).

(2) The date and time 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.

(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 characterization 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’s downtime during the reporting period and the total duration of CMS downtime as a percent of the total source operating time during that reporting period.

(8) A brief description of the source for which there was a deviation.

(9) A description of any changes in CMSs, processes, or controls since the last reporting period for the source for which there was a deviation.

(f)–(g) [Reserved]
You must submit the reports according to the procedures specified in paragraphs (h)(1) through (3) of this section.

(1) Within 60 days after the date of completing each performance test (as defined in §63.2) required by this subpart, you must submit the results of the performance tests, including any fuel analyses, following the procedure specified in either paragraph (h)(1)(i) or (ii) of this section.

(i) For data collected using test methods supported by the EPA’s Electronic Reporting Tool (ERT) as listed on the EPA’s ERT Web site (http://www.epa.gov/ttn/chief/ert/index.html), you must submit the results of the performance test to the EPA via the Compliance and Emissions Data Reporting Interface (CEDRI). (CEDRI can be accessed through the EPA’s Central Data Exchange (CDX) (https://cdx.epa.gov/).) Performance test data must be submitted in a file format generated through the use of the EPA’s ERT or an electronic file format consistent with the extensible markup language (XML) schema listed on the EPA’s ERT Web site. If you claim that some of the performance test information being transmitted is confidential business information (CBI), you must submit a complete file generated through the use of the EPA’s ERT or alternate file with the CBI omitted to the EPA. The electronic media must be clearly marked as CBI and mailed to U.S. EPA/OAPQS/CORE CBI Office, Attention: Group Leader, Measurement Policy Group, MD C404–02, 4930 Old Page Rd., Durham, NC 27703. The same ERT or alternate file with the CBI omitted must be submitted to the EPA via the EPA’s CDX as described earlier in this paragraph.

(ii) For any performance evaluations of continuous monitoring systems measuring relative accuracy test audit (RATA) pollutants that are not supported by the EPA’s ERT as listed on the EPA’s ERT Web site at the time of the evaluation, you must submit the results of the performance evaluation to the Administrator at the appropriate address listed in §63.13.

(2) Within 60 days after the date of completing each CEMS performance evaluation (as defined in §63.2), you must submit the results of the performance evaluation following the procedure specified in either paragraph (h)(2)(i) or (ii) of this section.

(i) For performance evaluations of continuous monitoring systems measuring relative accuracy test audit (RATA) pollutants that are supported by the EPA’s ERT as listed on the EPA’s ERT Web site at the time of the evaluation, you must submit the results of the performance evaluation to the EPA via the CEDRI. Performance evaluation data must be submitted in a file format generated through the use of the EPA’s ERT or an alternate file format consistent with the XML schema listed on the EPA’s ERT Web site. If you claim that some of the performance evaluation information being transmitted is CBI, you must submit a complete file generated through the use of the EPA’s ERT or alternate file with the CBI omitted to the EPA. The electronic media must be clearly marked as CBI and mailed to U.S. EPA/OAPQS/CORE CBI Office, Attention: Group Leader, Measurement Policy Group, MD C404–02, 4930 Old Page Rd., Durham, NC 27703. The same ERT or alternate file with the CBI omitted must be submitted to the EPA via the EPA’s CDX as described earlier in this paragraph.

(ii) For any performance evaluations of continuous monitoring systems measuring RATA pollutants that are not supported by the EPA’s ERT as listed on the EPA’s ERT Web site at the time of the evaluation, you must submit the results of the performance evaluation to the Administrator at the appropriate address listed in §63.13.

(3) You must submit all reports required by Table 9 of this subpart electronically to the EPA via the CEDRI. (CEDRI can be accessed through the EPA’s CDX.) You must use the appropriate electronic report in CEDRI for this subpart. Instead of using the electronic report in CEDRI for this subpart, you may submit an alternate
§ 63.7555 What records must I keep?

(a) You must keep records according to paragraphs (a)(1) and (2) 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 or semiannual compliance report that you submitted, according to the requirements in §63.10(b)(2)(xiv).

(2) Records of performance tests, fuel analyses, or other compliance demonstrations and performance evaluations as required in §63.10(b)(2)(viii).

(b) For each CEMS, COMS, and continuous monitoring system you must keep records according to paragraphs (b)(1) through (5) of this section.

(1) Records described in §63.10(b)(2)(vii) through (xii).

(2) Monitoring data for continuous opacity monitoring system during a performance evaluation as required in §63.6(b)(7)(i) and (ii).

(3) Previous (i.e., superseded) versions of the performance evaluation plan as required in §63.8(d)(3).

(4) Request for alternatives to relative accuracy test for CEMS as required in §63.8(f)(6)(i).

(5) Records of the date and time that each deviation started and stopped.

(c) You must keep the records required in Table 8 to this subpart including records of all monitoring data and calculated averages for applicable operating limits, such as opacity, pressure drop, pH, and operating load, to show continuous compliance with each emission limit and operating limit that applies to you.

(d) For each boiler or process heater subject to an emission limit in Tables 1, 2, or 11 through 13 to this subpart, you must also keep the applicable records in paragraphs (d)(1) through (11) of this section.

(1) You must keep records of monthly fuel use by each boiler or process heater, including the type(s) of fuel and amount(s) used.

(2) If you combust non-hazardous secondary materials that have been determined not to be solid waste pursuant to §241.3(b)(2) and (2) of this chapter, you must keep a record that documents how the secondary material satisfies each of the legitimacy criteria under §241.3(d)(1) of this chapter. If you combust a fuel that has been processed from a discarded non-hazardous secondary material pursuant to §241.3(b)(4) of this chapter, you must keep records as to how the operations that produced the fuel satisfy the definition of processing in §241.2 of this chapter. If the fuel received a non-waste determination pursuant to the petition process submitted under §241.3(c) of this chapter, you must keep a record that documents how the fuel satisfies the requirements of the petition process. For operating units that combust non-hazardous secondary materials as fuel per §241.4 of this chapter, you must keep records documenting that the material is listed as a non-waste under §241.4(a) of this chapter. Units exempt from the incinerator standards under section 129(g)(1) of the Clean Air Act because they are qualifying facilities burning a homogeneous waste stream do not need to maintain the records described in this paragraph (d)(2).

(3) A copy of all calculations and supporting documentation of maximum chlorine fuel input, using Equation 7 of §63.7530, that were done to demonstrate continuous compliance with the HCl...
emission limit, for sources that demonstrate compliance through performance testing. For sources that demonstrate compliance through fuel analysis, a copy of all calculations and supporting documentation of HCl emission rates, using Equation 16 of §63.7530, that were done to demonstrate compliance with the HCl emission limit. Supporting documentation should include results of any fuel analyses and basis for the estimates of maximum chlorine fuel input or HCl emission rates. You can use the results from one fuel analysis for multiple boilers and process heaters provided they are all burning the same fuel type. However, you must calculate chlorine fuel input, or HCl emission rate, for each boiler and process heater.

(4) A copy of all calculations and supporting documentation of maximum mercury fuel input, using Equation 8 of §63.7530, that were done to demonstrate continuous compliance with the mercury emission limit for sources that demonstrate compliance through performance testing. For sources that demonstrate compliance through fuel analysis, a copy of all calculations and supporting documentation of mercury emission rates, using Equation 17 of §63.7530, that were done to demonstrate compliance with the mercury emission limit. Supporting documentation should include results of any fuel analyses and basis for the estimates of maximum mercury fuel input or mercury emission rates. You can use the results from one fuel analysis for multiple boilers and process heaters provided they are all burning the same fuel type. However, you must calculate mercury fuel input, or mercury emission rates, for each boiler and process heater.

(5) If, consistent with §63.7515(b), you choose to stack test less frequently than annually, you must keep a record that documents that your emissions in the previous stack test(s) were less than 75 percent of the applicable emission limit (or, in specific instances noted in Tables 1 and 2 or 11 through 13 to this subpart, less than the applicable emission limit), and document that there was no change in source operations including fuel composition and operation of air pollution control equipment that would cause emissions of the relevant pollutant to increase within the past year.

(6) Records of the occurrence and duration of each malfunction of the boiler or process heater, or of the associated air pollution control and monitoring equipment.

(7) Records of actions taken during periods of malfunction to minimize emissions in accordance with the general duty to minimize emissions in §63.7500(a)(3), including corrective actions to restore the malfunctioning boiler or process heater, air pollution control, or monitoring equipment to its normal or usual manner of operation.

(8) A copy of all calculations and supporting documentation of maximum TSM fuel input, using Equation 9 of §63.7530, that were done to demonstrate continuous compliance with the TSM emission limit for sources that demonstrate compliance through performance testing. For sources that demonstrate compliance through fuel analysis, a copy of all calculations and supporting documentation of TSM emission rates, using Equation 18 of §63.7530, that were done to demonstrate compliance with the TSM emission limit. Supporting documentation should include results of any fuel analyses and basis for the estimates of maximum TSM fuel input or TSM emission rates. You can use the results from one fuel analysis for multiple boilers and process heaters provided they are all burning the same fuel type. However, you must calculate TSM fuel input, or TSM emission rates, for each boiler and process heater.

(9) You must maintain records of the calendar date, time, occurrence and duration of each startup and shutdown.

(10) You must maintain records of the type(s) and amount(s) of fuels used during each startup and shutdown.

(11) For each startup period, for units selecting paragraph (2) of the definition of “startup” in §63.7575 you must maintain records of the time that clean fuel combustion begins; the time when you start feeding fuels that are not clean fuels; the time when useful thermal energy is first supplied; and the time when the PM controls are engaged.
(12) If you choose to rely on paragraph (2) of the definition of “startup” in §63.7575, for each startup period, you must maintain records of the hourly steam temperature, hourly steam pressure, hourly steam flow, hourly flue gas temperature, and all hourly average CMS data (e.g., CEMS, PM CPMS, COMS, ESP total secondary electric power input, scrubber pressure drop, scrubber liquid flow rate) collected during each startup period to confirm that the control devices are engaged. In addition, if compliance with the PM emission limit is demonstrated using a PM control device, you must maintain records as specified in paragraphs (d)(12)(i) through (iii) of this section.

(i) For a boiler or process heater with an electrostatic precipitator, record the number of fields in service, as well as each field’s secondary voltage and secondary current during each hour of startup.

(ii) For a boiler or process heater with a fabric filter, record the number of compartments in service, as well as the differential pressure across the baghouse during each hour of startup.

(iii) For a boiler or process heater with a wet scrubber needed for filterable PM control, record the scrubber’s liquid flow rate and the pressure drop during each hour of startup.

(13) If you choose to use paragraph (2) of the definition of “startup” in §63.7575 and you find that you are unable to safely engage and operate your PM control(s) within 1 hour of first firing of non-clean fuels, you may choose to rely on paragraph (1) of definition of “startup” in §63.7575 or you may submit to the delegated permitting authority a request for a variance with the PM controls requirement, as described below.

(i) The request shall provide evidence of a documented manufacturer-identified safety issue.

(ii) The request shall provide information to document that the PM control device is adequately designed and sized to meet the applicable PM emission limit.

(iii) In addition, the request shall contain documentation that:

(A) The unit is using clean fuels to the maximum extent possible to bring the unit and PM control device up to the temperature necessary to alleviate or prevent the identified safety issues prior to the combustion of primary fuel;

(B) The unit has explicitly followed the manufacturer’s procedures to alleviate or prevent the identified safety issue; and

(C) Identifies with specificity the details of the manufacturer’s statement of concern.

(iv) You must comply with all other work practice requirements, including but not limited to data collection, recordkeeping, and reporting requirements.

(e) If you elect to average emissions consistent with §63.7522, you must additionally keep a copy of the emission averaging implementation plan required in §63.7522(g), all calculations required under §63.7522, including monthly records of heat input or steam generation, as applicable, and monitoring records consistent with §63.7541.

(f) If you elect to use efficiency credits from energy conservation measures to demonstrate compliance according to §63.7533, you must keep a copy of the Implementation Plan required in §63.7533(d) and copies of all data and calculations used to establish credits according to §63.7533(b), (c), and (f).

(g) If you elected to demonstrate that the unit meets the specification for mercury for the unit designed to burn gas 1 subcategory, you must maintain monthly records (or at the frequency required by §63.7540(c)) of the calculations and results of the fuel specification for mercury in Table 6.

(h) If you operate a unit in the unit designed to burn gas 1 subcategory that is subject to this subpart, and you use an alternative fuel other than natural gas, refinery gas, gaseous fuel subject to another subpart under this part, other gas 1 fuel, or gaseous fuel subject to another subpart of this part or part 60, 61, or 65, you must keep records of the total hours per calendar year that alternative fuel is burned and the total hours per calendar year that the unit operated during periods of gas curtailment or gas supply emergencies.

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 on site, or they must be accessible from on site (for example, through a computer network), for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to §63.10(b)(1). You can keep the records off site for the remaining 3 years.

What parts of the General Provisions apply to me?

Table 10 to this subpart shows which parts of the General Provisions in §§63.1 through 63.15 apply to you.

Who implements and enforces this subpart?

(a) This subpart can be implemented and enforced by the EPA, or an Administrator such as your state, local, or tribal agency. If the EPA Administrator has delegated authority to your state, local, or tribal agency, then that agency (as well as the EPA) 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 listed in paragraphs (b)(1) through (4) of this section are retained by the EPA Administrator and are not transferred to the state, local, or tribal agency, however, the EPA retains oversight of this subpart and can take enforcement actions, as appropriate.

10-day rolling average means the arithmetic mean of the previous 240 hours of valid operating data. Valid data excludes hours during startup and shutdown, data collected during periods when the monitoring system is out of control as specified in your site-specific monitoring plan, while conducting repairs associated with periods when the monitoring system is out of control, or while conducting required monitoring system quality assurance or quality control activities, and periods when this unit is not operating. The 240 hours should be consecutive, but not necessarily continuous if operations were intermittent.

30-day rolling average means the arithmetic mean of the previous 720 hours of valid CO CEMS data. The 720 hours should be consecutive, but not necessarily continuous if operations were intermittent. For parameters other than CO, 30-day rolling average means either the arithmetic mean of all valid hours of data from 30 successive operating days or the arithmetic mean of the previous 720 hours of valid operating data. Valid data excludes hours during startup and shutdown, data collected during periods when the monitoring system is out of control as specified in your site-specific monitoring plan, while conducting repairs...
associated with periods when the monitoring system is out of control, or while conducting required monitoring system quality assurance or quality control activities, and periods when this unit is not operating.

Annual capacity factor means the ratio between the actual heat input to a boiler or process heater from the fuels burned during a calendar year and the potential heat input to the boiler or process heater had it been operated for 8,760 hours during a year at the maximum steady state design heat input capacity.

Annual heat input means the heat input for the 12 months preceding the compliance demonstration.

Average annual heat input rate means total heat input divided by the hours of operation for the 12 months preceding the compliance demonstration.

Bag leak detection system means a group of instruments that are capable of monitoring particulate matter loadings in the exhaust of a fabric filter (i.e., baghouse) in order to detect bag failures. A bag leak detection system includes, but is not limited to, an instrument that operates on electrodynamic, triboelectric, light scattering, light transmittance, or other principle to monitor relative particulate matter loadings.

Benchmark means the fuel heat input for a boiler or process heater for the one-year period before the date that an energy demand reduction occurs, unless it can be demonstrated that a different time period is more representative of historical operations.

Biodiesel means a mono-alkyl ester derived from biomass and conforming to ASTM D6751–11b, Standard Specification for Biodiesel Fuel Blend Stock (B100) for Middle Distillate Fuels (incorporated by reference, see §63.14).

Biomass or bio-based solid fuel means any biomass-based solid fuel that have not been painted, pigment-stained, or pressure treated, does not contain contaminants at concentrations not normally associated with virgin biomass materials and has a moisture content of less than 20 percent and is not a solid waste.

Clean dry biomass means any biomass-based solid fuel that have not been painted, pigment-stained, or pressure treated, does not contain contaminants at concentrations not normally associated with virgin biomass materials and has a moisture content of less than 20 percent and is not a solid waste.

Coal means all solid fuels classifiable as anthracite, bituminous, sub-bituminous, or lignite by ASTM D388 (incorporated by reference, see §63.14), coal refuse, and petroleum coke. For the purposes of this subpart, this definition of “coal” includes synthetic fuels derived from coal, including but not limited to, solvent-refined coal, coal-oil mixtures, and coal-water mixtures. Coal derived gases are excluded from this definition.
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 (6,000 Btu per pound) on a dry basis.

Commercial/institutional boiler means a boiler used in commercial establishments or institutional establishments such as medical centers, nursing homes, research centers, institutions of higher education, elementary and secondary schools, libraries, religious establishments, governmental buildings, hotels, restaurants, and laundries to provide electricity, steam, and/or hot water.

Common stack means the exhaust of emissions from two or more affected units through a single flue. Affected units with a common stack may each have separate air pollution control systems located before the common stack, or may have a single air pollution control system located after the exhausts come together in a single flue.

Cost-effective energy conservation measure means a measure that is implemented to improve the energy efficiency of the boiler or facility that has a payback (return of investment) period of 2 years or less.

Daily block average means the arithmetic mean of all valid emission concentrations or parameter levels recorded when a unit is operating measured over the 24-hour period from 12 a.m. (midnight) to 12 a.m. (midnight), except for periods of startup and shutdown or downtime.

Deviation. (1) Deviation means any instance in which an affected source subject to this subpart, or an owner or operator of such a source:

(i) Fails to meet any applicable requirement or obligation established by this subpart including, but not limited to, any emission limit, operating limit, or work practice standard; or

(ii) 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.

(2) A deviation is not always a violation.

Dioxins/furans means tetra- through octa-chlorinated dibenzo-p-dioxins and dibenzofurans.

Distillate oil means fuel oils that contain 0.05 weight percent nitrogen or less and comply with the specifications for fuel oil numbers 1 and 2, as defined by the American Society of Testing and Materials in ASTM D396 (incorporated by reference, see §63.14) or diesel fuel oil numbers 1 and 2, as defined by the American Society for Testing and Materials in ASTM D975 (incorporated by reference, see §63.14), kerosene, and biodiesel as defined by the American Society of Testing and Materials in ASTM D6751-11b (incorporated by reference, see §60.14).

Dry scrubber means an add-on air pollution control system that injects dry alkaline sorbent (dry injection) or sprays an alkaline sorbent (spray dryer) to react with and neutralize acid gas in the exhaust stream forming a dry powder material. Sorbent injection systems used as control devices in fluidized bed boilers and process heaters are included in this definition. A dry scrubber is a dry control system.

Dutch oven means a unit having a refractory-walled cell connected to a conventional boiler setting. Fuel materials are introduced through an opening in the roof of the dutch oven and burn in a pile on its floor. Fluidized bed boilers are not part of the dutch oven design category.

Efficiency credit means emission reductions above those required by this subpart. Efficiency credits generated may be used to comply with the emissions limits. Credits may come from pollution prevention projects that result in reduced fuel use by affected units. Boilers that are shut down cannot be used to generate credits unless the facility provides documentation linking the permanent shutdown to implementation of the energy conservation measures identified in the energy assessment.

Electric utility steam generating unit (EGU) means a fossil fuel-fired combustion unit of more than 25 megawatts electric (MWe) that serves a generator that produces electricity for sale. A fossil fuel-fired unit that cogenerates steam and electricity and supplies more than one-third of its potential
electric output capacity and more than 25 MWe output to any utility power distribution system for sale is considered an electric utility steam generating unit. To be “capable of combusting” fossil fuels, an EGU would need to have these fuels allowed in their operating permits and have the appropriate fuel handling facilities on-site or otherwise available (e.g., coal handling equipment, including coal storage area, belts and conveyers, pulverizers, etc.; oil storage facilities). In addition, fossil fuel-fired EGU means any EGU that fired fossil fuel for more than 10.0 percent of the average annual heat input in any 3 consecutive calendar years or for more than 15.0 percent of the annual heat input during any one calendar year after April 16, 2012.

Electrostatic precipitator (ESP) means an add-on air pollution control device used to capture particulate matter by charging the particles using an electrostatic field, collecting the particles using a grounded collecting surface, and transporting the particles into a hopper. An electrostatic precipitator is usually a dry control system.

Energy assessment means the following for the emission units covered by this subpart:

1. The energy assessment for facilities with affected boilers and process heaters with a combined heat input capacity of less than 0.3 trillion Btu (TBTu) per year will be 8 on-site technical labor hours in length maximum, but may be longer at the discretion of the owner or operator of the affected source. The boiler system(s), process heater(s), and any on-site energy use system(s) accounting for at least 50 percent of the affected boiler(s) energy production or as applicable, will be evaluated to identify energy savings opportunities, within the limit of performing an 8-hour on-site energy assessment.

2. The energy assessment for facilities with affected boilers and process heaters with a combined heat input capacity of 0.3 to 1.0 TBTu/year will be 24 on-site technical labor hours in length maximum, but may be longer at the discretion of the owner or operator of the affected source. The boiler system(s), process heater(s), and any on-site energy use system(s) accounting for at least 50 percent of the energy production for at least 20 percent of the energy (e.g., steam, process heat, hot water, or electricity) production, as applicable, will be evaluated to identify energy savings opportunities.

3. The energy assessment for facilities with affected boilers and process heaters with a combined heat input capacity greater than 1.0 TBTu/year will be up to 24 on-site technical labor hours in length for the first TBTu/year plus 8 on-site technical labor hours for every additional 1.0 TBTu/year not to exceed 160 on-site technical hours, but may be longer at the discretion of the owner or operator of the affected source. The boiler system(s), process heater(s), and any on-site energy use system(s) accounting for at least 20 percent of the energy production (e.g., steam, process heat, hot water, or electricity) production, as applicable, will be evaluated to identify energy savings opportunities.

4. The on-site energy use systems serving as the basis for the percent of affected boiler(s) and process heater(s) energy production in paragraphs (1), (2), and (3) of this definition may be segmented by production area or energy use area as most logical and applicable to the specific facility being assessed (e.g., product X manufacturing area; product Y drying area; Building Z).

Energy management practices means the set of practices and procedures designed to manage energy use that are demonstrated by the facility’s energy policies, a facility energy manager and other staffing responsibilities, energy performance measurement and tracking methods, an energy saving goal, action plans, operating procedures, internal reporting requirements, and periodic review intervals used at the facility.

Energy management program means a program that includes a set of practices and procedures designed to manage energy use that are demonstrated
by the facility’s energy policies, a facility energy manager and other staffing responsibilities, energy performance measurement and tracking methods, an energy saving goal, action plans, operating procedures, internal reporting requirements, and periodic review intervals used at the facility. Facilities may establish their program through energy management systems compatible with ISO 50001.

Energy use system includes the following systems located on-site that use energy (steam, hot water, or electricity) provided by the affected boiler or process heater: process heating; compressed air systems; machine drive (motors, pumps, fans); process cooling; facility heating, ventilation, and air-conditioning systems; hot water systems; building envelope; and lighting; or other systems that use steam, hot water, process heat, or electricity provided by the affected boiler or process heater. Energy use systems are only those systems using energy clearly produced by affected boilers and process heaters.

Equivalent means the following only as this term is used in Table 6 to this subpart:

1. An equivalent sample collection procedure means a published voluntary consensus standard or practice (VCS) or EPA method that includes collection of a minimum of three composite fuel samples, with each composite consisting of a minimum of three increments collected at approximately equal intervals over the test period.

2. An equivalent sample compositing procedure means a published VCS or EPA method to systematically mix and obtain a representative subsample (part) of the composite sample.

3. An equivalent sample preparation procedure means a published VCS or EPA method that: Clearly states that the standard, practice or method is appropriate for the pollutant and the fuel matrix; or is cited as an appropriate sample preparation standard, practice or method for the pollutant in the chosen VCS or EPA determinative or analytical method.

4. An equivalent procedure for determining heat content means a published VCS or EPA method to obtain gross calorific (or higher heating) value.

5. An equivalent procedure for determining fuel moisture content means a published VCS or EPA method to obtain moisture content. If the sample analysis plan calls for determining metals (especially the mercury, selenium, or arsenic) using an aliquot of the dried sample, then the drying temperature must be modified to prevent vaporizing these metals. On the other hand, if metals analysis is done on an “as received” basis, a separate aliquot can be dried to determine moisture content and the metals concentration mathematically adjusted to a dry basis.

6. An equivalent pollutant (mercury, HCl) determinative or analytical procedure means a published VCS or EPA method that clearly states that the standard, practice, or method is appropriate for the pollutant and the fuel matrix and has a published detection limit equal or lower than the methods listed in Table 6 to this subpart for the same purpose.

Fabric filter means an add-on air pollution control device used to capture particulate matter by filtering gas streams through filter media, also known as a baghouse. A fabric filter is a dry control system.

Federally enforceable means all limitations and conditions that are enforceable by the EPA Administrator, including, but not limited to, the requirements of 40 CFR parts 60, 61, 63, and 65, requirements within any applicable state implementation plan, and any permit requirements established under 40 CFR 52.21 or under 40 CFR 51.18 and 40 CFR 51.24.

Fluidized bed boiler means a boiler utilizing a fluidized bed combustion process that is not a pulverized coal boiler.

Fluidized bed boiler with an integrated fluidized bed heat exchanger means a boiler utilizing a fluidized bed combustion where the entire tube surface area is located outside of the furnace section at the exit of the cyclone section and exposed to the flue gas stream for conductive heat transfer. This design applies only to boilers in the unit designed to burn coal/solid fossil fuel subcategory that fire coal refuse.

Fluidized bed combustion means a process where a fuel is burned in a bed
of granulated particles, which are maintained in a mobile suspension by the forward flow of air and combustion products.

_Fossil fuel_ means natural gas, oil, coal, and any form of solid, liquid, or gaseous fuel derived from such material.

_Fuel cell_ means a boiler type in which the fuel is dropped onto suspended fixed grates and is fired in a pile. The refractory-lined fuel cell uses combustion air preheating and positioning of secondary and tertiary air injection ports to improve boiler efficiency. Fluidized bed, dutch oven, pile burner, hybrid suspension grate, and suspension burners are not part of the fuel cell subcategory.

_Fuel type_ means each category of fuels that share a common name or classification. Examples include, but are not limited to, bituminous coal, sub-bituminous coal, lignite, anthracite, biomass, distillate oil, residual oil. Individual fuel types received from different suppliers are not considered new fuel types.

_Gaseous fuel_ includes, but is not limited to, natural gas, process gas, landfill gas, coal derived gas, refinery gas, and biogas. Blast furnace gas and process gases that are regulated under another subpart of this part, or part 60, part 61, or part 65 of this chapter, are exempted from this definition.

_Heat input_ means heat derived from combustion of fuel in a boiler or process heater and does not include the heat input from preheated combustion air, recirculated flue gases, returned condensate, or exhaust gases from other sources such as gas turbines, internal combustion engines, kilns, etc.

_Heavy liquid_ includes residual oil and any other liquid fuel not classified as a light liquid.

_Hourly average_ means the arithmetic average of at least four CMS data values representing the four 15-minute periods in an hour, or at least two 15-minute data values during an hour when CMS calibration, quality assurance, or maintenance activities are being performed.

_Hot water heater_ means a closed vessel with a capacity of no more than 120 U.S. gallons in which water is heated by combustion of gaseous, liquid, or biomass/bio-based solid fuel and is withdrawn for use external to the vessel. Hot water boilers (i.e., not generating steam) combusting gaseous, liquid, or biomass fuel with a heat input capacity of less than 1.6 million Btu per hour are included in this definition. The 120 U.S. gallon capacity threshold to be considered a hot water heater is independent of the 1.6 MMBtu/hr heat input capacity threshold for hot water boilers. Hot water heater also means a tankless unit that provides on demand hot water.

_Hybrid suspension grate boiler_ means a boiler designed with air distributors to spread the fuel material over the entire width and depth of the boiler combustion zone. The biomass fuel combusted in these units exceeds a moisture content of 40 percent on an as-fired annual heat input basis as demonstrated by monthly fuel analysis. The drying and much of the combustion of the fuel takes place in suspension, and the combustion is completed on the grate or floor of the boiler. Fluidized bed, dutch oven, and pile burner designs are not part of the hybrid suspension grate boiler design category.

_Industrial boiler_ means a boiler used in manufacturing, processing, mining, and refining or any other industry to provide steam, hot water, and/or electricity.

_Light liquid_ includes distillate oil, biodiesel, or vegetable oil.

_Limited-use boiler or process heater_ means any boiler or process heater that burns any amount of solid, liquid, or gaseous fuels and has a federally enforceable annual capacity factor of no more than 10 percent.

_Liquid fuel_ includes, but is not limited to, light liquid, heavy liquid, any form of liquid fuel derived from petroleum, used oil, liquid biofuels, biodiesel, and vegetable oil.

_Load fraction_ means the actual heat input of a boiler or process heater divided by heat input during the performance test that established the minimum sorbent injection rate or minimum activated carbon injection rate, expressed as a fraction (e.g., for 50 percent load the load fraction is 0.5). For boilers and process heaters that co-fire natural gas or refinery gas with a solid or liquid fuel, the load fraction is...
determined by the actual heat input of the solid or liquid fuel divided by heat input of the solid or liquid fuel fired during the performance test (e.g., if the performance test was conducted at 100 percent solid fuel firing, for 100 percent load firing 50 percent solid fuel and 50 percent natural gas the load fraction is 0.5).

**Major source for oil and natural gas production facilities**, 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. Emissions from processes, operations, or equipment that are not part of the same facility, as defined in this section, shall not be aggregated; and
3. For facilities that are production field facilities, only HAP emissions from glycol dehydration units and storage vessels with the potential for flash emissions shall be aggregated for a major source determination. For facilities that are not production field facilities, HAP emissions from all HAP emission units shall be aggregated for a major source determination.

**Metal process furnaces** are a subcategory of process heaters, as defined in this subpart, which include natural gas-fired annealing furnaces, preheat furnaces, reheat furnaces, aging furnaces, heat treat furnaces, and homogenizing furnaces.

**Million Btu (MMBtu)** means one million British thermal units.

**Minimum activated carbon injection rate** means load fraction multiplied by the lowest hourly average activated carbon injection rate measured according to Table 7 to this subpart during the most recent performance test demonstrating compliance with the applicable emission limit.

**Minimum oxygen level** means the lowest hourly average oxygen level measured according to Table 7 to this subpart during the most recent performance test demonstrating compliance with the applicable emission limit.

**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 gas, as defined in ASTM D1835 (incorporated by reference, see §63.14); 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 35 and 41 megajoules (MJ) per dry standard cubic meter (950 and 1,100 Btu per dry standard cubic foot); or

(4) Propane or propane derived synthetic natural gas. Propane means a colorless gas derived from petroleum and natural gas, with the molecular structure C\textsubscript{3}H\textsubscript{8}.

Opacity means the degree to which emissions reduce the transmission of light and obscure the view of an object in the background.

Operating day means a 24-hour period between 12 midnight and the following midnight during which any fuel is combusted at any time in the boiler or process heater unit. It is not necessary for fuel to be combusted for the entire 24-hour period. For calculating rolling average emissions, an operating day does not include the hours of operation during startup or shutdown.

Other combustor means a unit designed to burn solid fuel that is not classified as a dutch oven, fluidized bed, fuel cell, hybrid suspension grate boiler, pulverized coal boiler, stoker, sloped grate, or suspension boiler as defined in this subpart.

Other gas 1 fuel means a gaseous fuel that is not natural gas or refinery gas and does not exceed a maximum concentration of 40 micrograms/cubic meters of mercury.

Oxygen analyzer system means all equipment required to determine the oxygen content of a gas stream and used to monitor oxygen in the boiler or process heater flue gas, boiler or process heater firebox, or other appropriate location. This definition includes oxygen trim systems. The source owner or operator must install, calibrate, maintain, and operate the oxygen analyzer system in accordance with the manufacturer’s recommendations.

Oxygen trim system means a system of monitors that is used to maintain excess air at the desired level in a combustion device over its operating load range. A typical system consists of a flue gas oxygen and/or CO monitor that automatically provides a feedback signal to the combustion air controller or draft controller.

Particulate matter (PM) means any finely divided solid or liquid material, other than uncombined water, as measured by the test methods specified under this subpart, or an approved alternative method.

Period of gas curtailment or supply interruption means a period of time during which the supply of gaseous fuel to an affected boiler or process heater is restricted or halted for reasons beyond the control of the facility. The act of entering into a contractual agreement with a supplier of natural gas established for curtailment purposes does not constitute a reason that is under the control of a facility for the purposes of this definition. An increase in the cost or unit price of natural gas due to normal market fluctuations not during periods of supplier delivery restriction does not constitute a period of natural gas curtailment or supply interruption. On-site gaseous fuel system emergencies or equipment failures qualify as periods of supply interruption when the emergency or failure is beyond the control of the facility.

Pile burner means a boiler design incorporating a design where the anticipated biomass fuel has a high relative moisture content. Grates serve to support the fuel, and underfire air flowing up through the grates provides oxygen for combustion, cools the grates, promotes turbulence in the fuel bed, and fires the fuel. The most common form of pile burning is the dutch oven.

Process heater means an enclosed device using controlled flame, and the unit’s primary purpose is to transfer heat indirectly to a process material (liquid, gas, or solid) or to a heat transfer material (e.g., glycol or a mixture of glycol and water) for use in a process unit, instead of generating steam. Process heaters are devices in which the combustion gases do not come into direct contact with process materials.
A device combusting solid waste, as defined in §241.3 of this chapter, is not a process heater unless the device is exempt from the definition of a solid waste incineration unit as provided in section 129(g)(1) of the Clean Air Act. Process heaters do not include units used for comfort heat or space heat, food preparation for on-site consumption, or autoclaves. Waste heat process heaters are excluded from this definition.

*Pulverized coal boiler* means a boiler in which pulverized coal or other solid fossil fuel is introduced into an air stream that carries the coal to the combustion chamber of the boiler where it is fired in suspension.

*Qualified energy assessor* means:

(i) Someone who has demonstrated capabilities to evaluate energy savings opportunities for steam generation and major energy using systems, including, but not limited to:

   (i) Boiler combustion management.

   (ii) Boiler thermal energy recovery, including

      (A) Conventional feed water economizer.

      (B) Conventional combustion air preheater, and

      (C) Condensing economizer.

   (iii) Boiler blowdown thermal energy recovery.

   (iv) Primary energy resource selection, including

      (A) Fuel (primary energy source) switching, and

      (B) Applied steam energy versus direct-fired energy versus electricity.

   (v) Insulation issues.

   (vi) Steam trap and steam leak management.

   (vii) Condensate recovery.

   (viii) Steam end-use management.

   (2) Capabilities and knowledge includes, but is not limited to:

      (i) Background, experience, and recognized abilities to perform the assessment activities, data analysis, and report preparation.

      (ii) Familiarity with operating and maintenance practices for steam or process heating systems.

      (iii) Additional potential steam system improvement opportunities including improving steam turbine operations and reducing steam demand.

      (iv) Additional process heating system opportunities including effective utilization of waste heat and use of proper process heating methods.

      (v) Boiler-steam turbine cogeneration systems.

      (vi) Industry specific steam end-use systems.

*Refinery gas* means any gas that is generated at a petroleum refinery and is combusted. Refinery gas includes natural gas when the natural gas is combined and combusted in any proportion with a gas generated at a refinery. Refinery gas includes gases generated from other facilities when that gas is combined and combusted in any proportion with gas generated at a refinery.

*Regulated gas stream* means an offgas stream that is routed to a boiler or process heater for the purpose of achieving compliance with a standard under another subpart of this part or part 60, part 61, or part 65 of this chapter.

*Residential boiler* means a boiler used to provide heat and/or hot water and/or as part of a residential combined heat and power system. This definition includes boilers located at an institutional facility (e.g., university campus, military base, church grounds) or commercial/industrial facility (e.g., farm) used primarily to provide heat and/or hot water for:

   (1) A dwelling containing four or fewer families; or

   (2) A single unit residence dwelling that has since been converted or subdivided into condominiums or apartments.

*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 of Testing and Materials in ASTM D396–10 (incorporated by reference, see §63.14(b)).

*Responsible official* means responsible official as defined in §70.2.

*Rolling average* means the average of all data collected during the applicable averaging period. For demonstration of compliance with a CO CEMS-based emission limit based on CO concentration a 30-day (10-day) rolling average is comprised of the average of all the
hourly average concentrations over the previous 720 (240) operating hours calculated each operating day. To demonstrate compliance on a 30-day rolling average basis for parameters other than CO, you must indicate the basis of the 30-day rolling average period you are using for compliance, as discussed in §63.7655(e)(2)(iii). If you indicate the 30 operating day basis, you must calculate a new average value each operating day and shall include the measured hourly values for the preceding 30 operating days. If you select the 720 operating hours basis, you must average of all the hourly average concentrations over the previous 720 operating hours calculated each operating day.

Secondary material means the material as defined in §241.2 of this chapter.

Shutdown means the period in which cessation of operation of a boiler or process heater is initiated for any purpose. Shutdown begins when the boiler or process heater no longer supplies useful thermal energy (such as heat or steam) for heating, cooling, or process purposes and/or generates electricity or when no fuel is being fed to the boiler or process heater, whichever is earlier. Shutdown ends when the boiler or process heater no longer supplies useful thermal energy (such as heat or steam) for heating, cooling, or process purposes and/or generates electricity, and no fuel is being combusted in the boiler or process heater.

Sloped grate means a unit where the solid fuel is fed to the top of the grate from where it slides downwards; while sliding the fuel first dries and then ignites and burns. The ash is deposited at the bottom of the grate. Fluidized bed, dutch oven, pile burner, hybrid suspension burners, and fuel cells are not considered to be a sloped grate design.

Solid fossil fuel includes, but is not limited to, coal, coke, petroleum coke, and tire derived fuel.

Solid fuel means any solid fossil fuel or biomass or bio-based solid fuel.

Startup means:

(1) Either the first-ever firing of fuel in a boiler or process heater for the purpose of supplying useful thermal energy for heating and/or producing electricity, or for any other purpose, or the firing of fuel in a boiler after a shutdown event for any purpose. Startup ends when any of the useful thermal energy from the boiler or process heater is supplied for heating, and/or producing electricity, or for any other purpose, or

(2) The period in which operation of a boiler or process heater is initiated for any purpose. Startup begins with either the first-ever firing of fuel in a boiler or process heater for the purpose of supplying useful thermal energy (such as steam or heat) for heating, cooling, or process purposes, or producing electricity, or the firing of fuel in a boiler or process heater for any purpose after a shutdown event. Startup ends four hours after when the boiler or process heater supplies useful thermal energy (such as heat or steam) for heating, cooling, or process purposes, or generates electricity, whichever is earlier.

Steam output means:

(1) For a boiler that produces steam for process or heating only (no power generation), the energy content in terms of MMBtu of the boiler steam output,

(2) For a boiler that cogenerates process steam and electricity (also known as combined heat and power), the total energy output, which is the sum of the energy content of the steam exiting the turbine and sent to process in MMBtu and the energy of the electricity generated converted to MMBtu at a rate of 10,000 Btu per kilowatt-hour generated (10 MMBtu per megawatt-hour), and

(3) For a boiler that generates only electricity, the alternate output-based emission limits would be the appropriate emission limit from Table 1 or 2 of this subpart in units of pounds per million Btu heat input (lb per MWh).

(4) For a boiler that performs multiple functions and produces steam to be used for any combination of paragraphs (1), (2), and (3) of this definition that includes electricity generation of paragraph (3) of this definition, the total energy output, in terms of MMBtu of steam output, is the sum of the energy content of steam sent directly to the process and/or used for heating ($S_1$), the energy content of turbine steam sent to process plus energy in electricity according to paragraph
(2) of this definition ($S_1$), and the energy content of electricity generated by a turbine as paragraph (3) of this definition (MW\textsubscript{b}) and would be calculated using Equation 21 of this section. In the case of boilers supplying steam to one or more common heaters, $S_1$, $S_2$, and MW\textsubscript{b} for each boiler would be calculated based on the its (steam energy) contribution (fraction of total steam energy) to the common heater.

$$SO_M = S_1 + S_2 + (MW(3) \times CFn)$$  \hspace{1cm} \text{(Eq. 21)}$

Where:
- $SO_M$ = Total steam output for multi-function boiler, MMBtu
- $S_1$ = Energy content of steam sent directly to the process and/or used for heating, MMBtu
- $S_2$ = Energy content of turbine steam sent to the process plus energy in electricity according to (2) above, MMBtu
- MW\textsubscript{b} = Electricity generated according to paragraph (3) of this definition, MWh
- CFn = Conversion factor for the appropriate subcategory for converting electricity generated according to paragraph (3) of this definition to equivalent steam energy, MMBtu/MWh
- CFn for emission limits for boilers in the unit designed to burn solid fuel subcategory = 10.8
- CFn PM and CO emission limits for boilers in one of the subcategories of units designed to burn coal = 11.7
- CFn PM and CO emission limits for boilers in one of the subcategories of units designed to burn biomass = 12.1
- CFn for emission limits for boilers in one of the subcategories of units designed to burn liquid fuel = 11.2
- CFn for emission limits for boilers in the unit designed to burn gas 2 (other) subcategory = 6.2

Stoker means a unit consisting of a mechanically operated fuel feeding mechanism, a stationary or moving grate to support the burning of fuel and admit under-grate air to the fuel, an overfire air system to complete combustion, and an ash discharge system. This definition of stoker includes air swept stokers. There are two general types of stokers: Underfeed and overfeed. Overfeed stokers include mass feed and spreader stokers. Fluidized bed, dutch oven, pile burner, hybrid suspension grate, suspension burners, and fuel cells are not considered to be a stoker design.

Stoker/sloped grate/other unit designed to burn kiln dried biomass means the unit is in the units designed to burn biomass/bio-based solid subcategory that is either a stoker, sloped grate, or other combustor design and is not in the stoker/sloped grate/other units designed to burn wet biomass subcategory.

Stoker/sloped grate/other unit designed to burn wet biomass means the unit is in the units designed to burn biomass/bio-based solid subcategory that is either a stoker, sloped grate, or other combustor design and any of the biomass/bio-based solid fuel combusted in the unit exceeds 20 percent moisture on an annual heat input basis.

Suspension burner means a unit designed to fire dry biomass/bio-based solid particles in suspension that are conveyed in an airstream to the furnace like pulverized coal. The combustion of the fuel material is completed on a grate or floor below. The biomass/bio-based fuel combusted in the unit shall not exceed 20 percent moisture on an annual heat input basis. Fluidized bed, dutch oven, pile burner, and hybrid suspension grate units are not part of the suspension burner subcategory.

Temporary boiler means any gaseous or liquid fuel boiler or process heater that is designed to, and is capable of, being carried or moved from one location to another by means of, for example, wheels, skids, carrying handles, dollies, trailers, or platforms. A boiler or process heater is not a temporary boiler or process heater if any one of the following conditions exists:

1. The equipment is attached to a foundation.
2. The boiler or process heater or a replacement remains at a location within the facility and performs the same or similar function for more than 12 consecutive months, unless the regulatory agency approves an extension.
An extension may be granted by the regulating agency upon petition by the owner or operator of a unit specifying the basis for such a request. Any temporary boiler or process heater that replaces a temporary boiler or process heater at a location and performs the same or similar function will be included in calculating the consecutive time period.

(3) The equipment is located at a seasonal facility and operates during the full annual operating period of the seasonal facility, remains at the facility for at least 2 years, and operates at that facility for at least 3 months each year.

(4) The equipment is moved from one location to another within the facility but continues to perform the same or similar function and serve the same electricity, process heat, steam, and/or hot water system in an attempt to circumvent the residence time requirements of this definition.

Total selected metals (TSM) means the sum of the following metallic hazardous air pollutants: arsenic, beryllium, cadmium, chromium, lead, manganese, nickel and selenium.

Traditional fuel means the fuel as defined in §241.2 of this chapter.

Tune-up means adjustments made to a boiler or process heater in accordance with the procedures outlined in §63.7540(a)(10).

Ultra low sulfur liquid fuel means a distillate oil that has less than or equal to 15 ppm sulfur.

Unit designed to burn biomass/bio-based solid subcategory includes any boiler or process heater that burns at least 10 percent biomass or bio-based solids on an annual heat input basis in combination with solid fossil fuels, liquid fuels, or gaseous fuels.

Unit designed to burn coal/solid fossil fuel subcategory includes any boiler or process heater that burns any coal or other solid fossil fuel alone or at least 10 percent coal or other solid fossil fuel on an annual heat input basis in combination with liquid fuels, gaseous fuels, or less than 10 percent biomass and bio-based solids on an annual heat input basis.

Unit designed to burn gas 1 subcategory includes any boiler or process heater that burns only natural gas, refinery gas, and/or other gas 1 fuels. Gaseous fuel boilers and process heaters that burn liquid fuel for periodic testing of liquid fuel, maintenance, or operator training, not to exceed a combined total of 48 hours during any calendar year, are included in this definition. Gaseous fuel boilers and process heaters that burn liquid fuel during periods of gas curtailment or gas supply interruptions of any duration are also included in this definition.

Unit designed to burn gas 2 (other) subcategory includes any boiler or process heater that is not in the unit designed to burn gas 1 subcategory and burns any gaseous fuels either alone or in combination with less than 10 percent coal/solid fossil fuel, and less than 10 percent biomass/bio-based solid fuel on an annual heat input basis, and no liquid fuels. Gaseous fuel boilers and process heaters that are not in the unit designed to burn gas 1 subcategory and that burn liquid fuel for periodic testing of liquid fuel, maintenance, or operator training, not to exceed a combined total of 48 hours during any calendar year, are included in this definition. Gaseous fuel boilers and process heaters that are not in the unit designed to burn gas 1 subcategory and that burn liquid fuel during periods of gas curtailment or gas supply interruption of any duration are also included in this definition.

Unit designed to burn heavy liquid subcategory means a unit in the unit designed to burn liquid subcategory where at least 10 percent of the heat input from liquid fuels on an annual heat input basis comes from heavy liquids.

Unit designed to burn light liquid subcategory means a unit in the unit designed to burn liquid subcategory that is not part of the unit designed to burn heavy liquid subcategory.

Unit designed to burn liquid subcategory includes any boiler or process heater that burns any liquid fuel, but less than 10 percent coal/solid fossil fuel and less than 10 percent biomass/bio-based solid fuel on an annual heat input basis, either alone or in combination with gaseous fuels. Units in the
Environmental Protection Agency

§ 63.7575

unit design to burn gas 1 or unit designed to burn gas 2 (other subcategories that burn liquid fuel for periodic testing of liquid fuel, maintenance, or operator training, not to exceed a combined total of 48 hours during any calendar year are not included in this definition. Units in the unit design to burn gas 1 or unit designed to burn gas 2 (other subcategories during periods of gas curtailment or gas supply interruption of any duration are also not included in this definition. 

Unit designed to burn liquid fuel that is a non-continental unit means an industrial, commercial, or institutional boiler or process heater meeting the definition of the unit designed to burn liquid subcategory located in the State of Hawaii, the Virgin Islands, Guam, American Samoa, the Commonwealth of Puerto Rico, or the Northern Mariana Islands. 

Unit designed to burn solid fuel subcategory means any boiler or process heater that burns only solid fuels or at least 10 percent solid fuel on an annual heat input basis in combination with liquid fuels or gaseous fuels. 

Useful thermal energy means energy (i.e., steam, hot water, or process heat) that meets the minimum operating temperature, flow, and/or pressure required by any energy use system that uses energy provided by the affected boiler or process heater. 

Vegetable oil means oils extracted from vegetation. 

Voluntary Consensus Standards or VCS mean technical standards (e.g., materials specifications, test methods, sampling procedures, business practices) developed or adopted by one or more voluntary consensus bodies. EPA/Office of Air Quality Planning and Standards, by precedent, has only used VCS that are written in English. Examples of VCS bodies are: American Society of Testing and Materials (ASTM 100 Barr Harbor Drive, P.O. Box CB700, West Conshohocken, Pennsylvania 19428-2959, (800) 632-1373, http://www.astm.org), American Society of Mechanical Engineers (ASME ASME, Three Park Avenue, New York, NY 10016-5990, (800) 843-2763, http://www.asme.org), International Standards Organization (ISO 1, ch. de la Vole-Creuse, Case postale 56, CH-1211 Geneva 20, Switzerland, + 41 22 749 01 11, http://www.iso.org/iso/home.htm), Standards Australia (AS Level 10, The Exchange Centre, 20 Bridge Street, Sydney, GPO Box 476, Sydney NSW 2001, + 61 2 9237 6171 http://www.standards.org.au), British Standards Institution (BSI, 389 Chiswick High Road, London, W4 4AL, United Kingdom, + 44 (0)20 8996 9001, http://www.bsigroup.com), Canadian Standards Association (CSA 5060 Spectrum Way, Suite 100, Mississauga, Ontario LAW 5N6, Canada, 800-465-4727, http://www.csa.ca), European Committee for Standardization (CEN CENELEC Management Centre Avenue Marnix 17 B-1000 Brussels, Belgium + 32 2 550 08 11, http://www.cen.eu/cen), and German Engineering Standards (VDI VDI Guidelines Department, P.O. Box 10 11 39 40002, Duesseldorf, Germany, + 49 211 6214-230, http://www.vdi.eu). The types of standards that are not considered VCS are standards developed by: The United States, e.g., California (CARB) and Texas (TCEQ); industry groups, such as American Petroleum Institute (API), Gas Processors Association (GPA), and Gas Research Institute (GRI); and other branches of the U.S. government, e.g., Department of Defense (DOD) and Department of Transportation (DOT). This does not preclude EPA from using standards developed by groups that are not VCS bodies within their rule. When this occurs, EPA has done searches and reviews for VCS equivalent to these non-EPA methods. 

Waste heat boiler means a device that recovers normally unused energy (i.e., hot exhaust gas) and converts it to usable heat. Waste heat boilers are also referred to as heat recovery steam generators. Waste heat boilers are heat exchangers generating steam from incoming hot exhaust gas from an industrial (e.g., thermal oxidizer, kiln, furnace) or power (e.g., combustion turbine, engine) equipment. Duct burners are sometimes used to increase the temperature of the incoming hot exhaust gas. 

Waste heat process heater means an enclosed device that recovers normally unused energy (i.e., hot exhaust gas) and converts it to usable heat. Waste heat process heaters are also referred


### Pt. 63, Subpt. DDDDD, Table 1

40 CFR Ch. 1 (7–1–16 Edition)

to as recuperative process heaters. This definition includes both fired and unfired waste heat process heaters.

*Wet scrubber* means any add-on air pollution control device that mixes an aqueous stream or slurry with the exhaust gases from a boiler or process heater to control emissions of particulate matter or to absorb and neutralize acid gases, such as hydrogen chloride. A wet scrubber creates an aqueous stream or slurry as a byproduct of the emissions control process.

*Work practice standard* means any design, equipment, work practice, or operational standard, or combination thereof, that is promulgated pursuant to section 112(h) of the Clean Air Act.

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**TABLE 1 TO SUBPART DDDDD OF PART 63—EMISSION LIMITS FOR NEW OR RECONSTRUCTED BOILERS AND PROCESS HEATERS**

As stated in §63.7500, you must comply with the following applicable emission limits:

[Unit with heat input capacity of 10 million Btu per hour or greater]

<table>
<thead>
<tr>
<th>If your boiler or process heater is in this subcategory . . .</th>
<th>For the following pollutants . . .</th>
<th>The emissions must not exceed the following emission limits, except during startup and shutdown . . .</th>
<th>Or the emissions must not exceed the following alternative output-based limits, except during startup and shutdown . . .</th>
<th>Using this specified sampling volume or test run duration . . .</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Units in all subcategories designed to burn solid fuel.</td>
<td>a. HCl</td>
<td>2.2E–02 lb per MMBtu of heat input.</td>
<td>2.5E–02 lb per MMBtu of steam output or 0.28 lb per MWh.</td>
<td>For M26A, collect a minimum of 1 dscm per run; for M26 collect a minimum of 120 liters per run.</td>
</tr>
</tbody>
</table>
|  | b. Mercury | 8.0E–07 lb per MMBtu of heat input. | 8.7E–07 lb per MMBtu of steam output or 1.1E–05 lb per MWh. | For M29, collect a minimum of 4 dscm; for M30A or M30B, collect a minimum of 4 dscm as specified in the method; for ASTM D6784 collect a minimum of 4 dscm.
| 2. Units designed to burn coal/solid fossil fuel. | a. Filterable PM (or TSM). | 1.1E–03 lb per MMBtu of heat input; or (2.3E–05 lb per MMBtu of heat input). | 1.1E–03 lb per MMBtu of steam output or 1.4E–02 lb per MWh; or (2.7E–05 lb per MMBtu of steam output or 2.9E–04 lb per MWh). | Collect a minimum of 3 dscm per run. |
| 3. Pulverized coal boilers designed to burn coal/solid fossil fuel. | a. Carbon monoxide (CO) (or CEMS). | 130 ppm by volume on a dry basis corrected to 3 percent oxygen, 3-run average; or (320 ppm by volume on a dry basis corrected to 3 percent oxygen, 4, 30-day rolling average). | 0.11 lb per MMBtu of steam output or 1.4 lb per MWh; 3-run average. | 1 hr minimum sampling time. |
| 4. Stokers/others designed to burn coal/solid fossil fuel. | a. CO (or CEMS) | 130 ppm by volume on a dry basis corrected to 3 percent oxygen, 3-run average; or (340 ppm by volume on a dry basis corrected to 3 percent oxygen, 4, 30-day rolling average). | 0.12 lb per MMBtu of steam output or 1.4 lb per MWh; 3-run average. | 1 hr minimum sampling time. |
### Environmental Protection Agency

#### Pt. 63, Subpt. DDDD, Table 1

<table>
<thead>
<tr>
<th>If your boiler or process heater is in this subcategory . . .</th>
<th>For the following pollutants . . .</th>
<th>The emissions must not exceed the following emission limits, except during startup and shutdown . . .</th>
<th>Or the emissions must not exceed the following alternative output-based limits, except during startup and shutdown . . .</th>
<th>Using this specified sampling volume or test run duration . . .</th>
</tr>
</thead>
<tbody>
<tr>
<td>5. Fluidized bed units designed to burn coal/solid fossil fuel.</td>
<td>a. CO (or CEMS)</td>
<td>130 ppm by volume on a dry basis corrected to 3 percent oxygen, 3-run average; or (230 ppm by volume on a dry basis corrected to 3 percent oxygen, 30-day rolling average).</td>
<td>0.11 lb per MMBtu of steam output or 1.4 lb per MWh; 3-run average.</td>
<td>1 hr minimum sampling time.</td>
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<tr>
<td>6. Fluidized bed units with an integrated heat exchanger designed to burn coal/solid fossil fuel.</td>
<td>a. CO (or CEMS)</td>
<td>140 ppm by volume on a dry basis corrected to 3 percent oxygen, 3-run average; or (150 ppm by volume on a dry basis corrected to 3 percent oxygen, 30-day rolling average).</td>
<td>1.2E–01 lb per MMBtu of steam output or 1.5 lb per MWh; 3-run average.</td>
<td>1 hr minimum sampling time.</td>
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<tr>
<td>7. Stokers/sloped grate/others designed to burn wet biomass fuel.</td>
<td>a. CO (or CEMS)</td>
<td>620 ppm by volume on a dry basis corrected to 3 percent oxygen, 3-run average; or (390 ppm by volume on a dry basis corrected to 3 percent oxygen, 30-day rolling average).</td>
<td>5.8E–01 lb per MMBtu of steam output or 6.8 lb per MWh; 3-run average.</td>
<td>1 hr minimum sampling time.</td>
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<td>b. Filterable PM (or TSM).</td>
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<tr>
<td>8. Stokers/sloped grate/others designed to burn kiln-dried biomass fuel.</td>
<td>a. CO</td>
<td>460 ppm by volume on a dry basis corrected to 3 percent oxygen.</td>
<td>4.2E–01 lb per MMBtu of steam output or 5.1 lb per MWh.</td>
<td>1 hr minimum sampling time.</td>
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<td>b. Filterable PM (or TSM).</td>
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<tr>
<td>9. Fluidized bed units designed to burn biomass/bio-based solids.</td>
<td>a. CO (or CEMS)</td>
<td>230 ppm by volume on a dry basis corrected to 3 percent oxygen, 3-run average; or (310 ppm by volume on a dry basis corrected to 3 percent oxygen, 30-day rolling average).</td>
<td>2.2E–01 lb per MMBtu of steam output or 2.6 lb per MWh; 3-run average.</td>
<td>1 hr minimum sampling time.</td>
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<td>b. Filterable PM (or TSM).</td>
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<td>Table 1</td>
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<td>-----------------------------------------------------------------------</td>
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<tr>
<td>If your boiler or process heater is in this subcategory . . .</td>
<td>For the following pollutants . . .</td>
<td>The emissions must not exceed the following emission limits, except during startup and shutdown . . .</td>
<td>Or the emissions must not exceed the following alternative output-based limits, except during startup and shutdown . . .</td>
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<td>---------------------------------------------------------------------</td>
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<tr>
<td>10. Suspension burners designed to burn biomass/bio-based solids.</td>
<td>a. CO (or CEMS)        .................................................</td>
<td>2.400 ppm by volume on a dry basis corrected to 3 percent oxygen, 3-run average; or (2,000 ppm by volume on a dry basis corrected to 3 percent oxygen, 10-day rolling average).</td>
<td>1.9 lb per MMBlu of steam output or 27 lb per MWh; 3-run average.</td>
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<td></td>
<td>b. Filterable PM (or TSM) .............................................</td>
<td>3.1E–02 lb per MMBlu of heat input; or (6.5E–03 lb per MMBlu of heat input).</td>
<td>1 hr minimum sampling time.</td>
<td></td>
</tr>
<tr>
<td>11. Dutch Ovens/Pile burners designed to burn biomass/bio-based solids.</td>
<td>a. CO (or CEMS)        .................................................</td>
<td>330 ppm by volume on a dry basis corrected to 3 percent oxygen, 3-run average; or (520 ppm by volume on a dry basis corrected to 3 percent oxygen, 10-day rolling average).</td>
<td>3.5E–01 lb per MMBlu of steam output or 3.6 lb per MWh; 3-run average.</td>
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<td></td>
<td>b. Filterable PM (or TSM) .............................................</td>
<td>3.2E–03 lb per MMBlu of heat input; or (3.9E–05 lb per MMBlu of heat input).</td>
<td>Collect a minimum of 3 dscm per run.</td>
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</tr>
<tr>
<td>12. Fuel cell units designed to burn biomass/bio-based solids.</td>
<td>a. CO .................................................................</td>
<td>910 ppm by volume on a dry basis corrected to 3 percent oxygen.</td>
<td>1.1 lb per MMBlu of steam output or 1.0E + 01 lb per MWh.</td>
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<td></td>
<td>b. Filterable PM (or TSM) .............................................</td>
<td>2.0E–02 lb per MMBlu of heat input; or (2.9E–05 lb per MMBlu of heat input).</td>
<td>Collect a minimum of 2 dscm per run.</td>
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</tr>
<tr>
<td>13. Hybrid suspension grate boiler designed to burn biomass/bio-based solids.</td>
<td>a. CO (or CEMS) ..........................................................</td>
<td>1,100 ppm by volume on a dry basis corrected to 3 percent oxygen; or (800 ppm by volume on a dry basis corrected to 3 percent oxygen, 30-day rolling average).</td>
<td>1.4 lb per MMBlu of steam output or 12 lb per MWh; 3-run average.</td>
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<td></td>
<td>b. Filterable PM (or TSM) .............................................</td>
<td>2.6E–02 lb per MMBlu of heat input; or (4.4E–04 lb per MMBlu of heat input).</td>
<td>Collect a minimum of 3 dscm per run.</td>
<td></td>
</tr>
<tr>
<td>14. Units designed to burn liquid fuel.</td>
<td>a. HCl .................................................................</td>
<td>4.4E–04 lb per MMBlu of heat input.</td>
<td>4.8E–04 lb per MMBlu of steam output or 6.1E–03 lb per MWh.</td>
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</tr>
</tbody>
</table>

For M26A: Collect a minimum of 2 dscm per run; for M26, collect a minimum of 240 liters per run.
### Environmental Protection Agency

#### Pt. 63, Subpt. DDDDD, Table 1

<table>
<thead>
<tr>
<th>Subcategory</th>
<th>Pollutants</th>
<th>Emissions Limit</th>
<th>Sampling Volume/Duration</th>
</tr>
</thead>
<tbody>
<tr>
<td>If your boiler or process heater is in this sub-category . . .</td>
<td>For the following pollutants . . .</td>
<td>Or the emissions must not exceed the following alternative output-based limits, except during startup and shutdown . . .</td>
<td>Using this specified sampling volume or test run duration . . .</td>
</tr>
<tr>
<td>b. Mercury</td>
<td>4.8E–07 lb per MMBtu of heat input</td>
<td>5.3E–07 lb per MMBtu of steam output or 6.7E–06 lb per MWh</td>
<td>For M29, collect a minimum of 4 dscm per run; for M30A or M30B, collect a minimum sample as specified in the method; for ASTM D6784b collect a minimum of 4 dscm.</td>
</tr>
<tr>
<td>15. Units designed to burn heavy liquid fuel</td>
<td>a. CO</td>
<td>130 ppm by volume on a dry basis corrected to 3 percent oxygen, 3-run average</td>
<td>0.13 lb per MMBtu of steam output or 1.4 lb per MWh; 3-run average</td>
</tr>
<tr>
<td></td>
<td>b. Filterable PM (or TSM)</td>
<td>1.3E–02 lb per MMBtu of heat input; or (7.5E–05 lb per MMBtu of heat input)</td>
<td>1.5E–02 lb per MMBtu of steam output or 1.4 lb per MWh; (8.2E–05 lb per MMBtu of steam output or 1.1E–03 lb per MWh)</td>
</tr>
<tr>
<td>16. Units designed to burn light liquid fuel</td>
<td>a. CO</td>
<td>130 ppm by volume on a dry basis corrected to 3 percent oxygen.</td>
<td>0.13 lb per MMBtu of steam output or 1.4 lb per MWh</td>
</tr>
<tr>
<td></td>
<td>b. Filterable PM (or TSM)</td>
<td>1.1E–03 lb per MMBtu of heat input; or (2.9E–05 lb per MMBtu of heat input)</td>
<td>1.2E–03 lb per MMBtu of steam output or 1.4 lb per MWh; (3.2E–05 lb per MMBtu of steam output or 4.0E–04 lb per MWH)</td>
</tr>
<tr>
<td>17. Units designed to burn liquid fuel that are non-continental units</td>
<td>a. CO</td>
<td>130 ppm by volume on a dry basis corrected to 3 percent oxygen, 3-run average based on stack test</td>
<td>0.13 lb per MMBtu of steam output or 1.4 lb per MWh; 3-run average</td>
</tr>
<tr>
<td></td>
<td>b. Filterable PM (or TSM)</td>
<td>2.3E–02 lb per MMBtu of heat input; or (8.6E–04 lb per MMBtu of heat input)</td>
<td>2.5E–02 lb per MMBtu of steam output or 1.6E–02 lb per MWh; (3.2E–04 lb per MMBtu of steam output or 1.2E–02 lb per MWH)</td>
</tr>
<tr>
<td>18. Units designed to burn gas 2 (other) gases</td>
<td>a. CO</td>
<td>130 ppm by volume on a dry basis corrected to 3 percent oxygen.</td>
<td>0.16 lb per MMBtu of steam output or 1.0 lb per MWh</td>
</tr>
<tr>
<td></td>
<td>b. HCl</td>
<td>1.7E–03 lb per MMBtu of heat input</td>
<td>2.9E–03 lb per MMBtu of steam output or 1.8E–02 lb per MWh</td>
</tr>
<tr>
<td></td>
<td>c. Mercury</td>
<td>7.9E–06 lb per MMBtu of heat input</td>
<td>1.4E–05 lb per MMBtu of steam output or 8.3E–05 lb per MWh</td>
</tr>
</tbody>
</table>
If your boiler or process heater is in this subcategory . . .

For the following pollutants . . .

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>Emission Limit</th>
<th>Sampling Requirement</th>
</tr>
</thead>
<tbody>
<tr>
<td>d. Filterable PM (or TSM),</td>
<td>6.7E–03 lb per MMBtu of heat input; or (2.1E–04 lb per MMBtu of heat input).</td>
<td>Collect a minimum of 3 dscm per run.</td>
</tr>
</tbody>
</table>

TABLE 2 TO SUBPART DDDDD OF PART 63—EMISSION LIMITS FOR EXISTING BOILERS AND PROCESS HEATERS

As stated in §63.7500, you must comply with the following applicable emission limits:

If your boiler or process heater is in this subcategory . . .

For the following pollutants . . .

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>Emission Limit</th>
<th>Sampling Requirement</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. HCl</td>
<td>2.2E–02 lb per MMBtu of heat input.</td>
<td>For M26A, Collect a minimum of 1 dscm per run; for M26, collect a minimum of 120 liters per run.</td>
</tr>
<tr>
<td>b. Mercury</td>
<td>5.7E–06 lb per MMBtu of heat input.</td>
<td>For M29, collect a minimum sample as specified in the method; for ASTM D6784, collect a minimum of 3 dscm. Collect a minimum of 2 dscm per run.</td>
</tr>
</tbody>
</table>

2. Units design to burn coal/solid fossil fuel.

a. Filterable PM (or TSM). | 4.0E–02 to 0.01 lb per MMBtu of heat input; or (5.3E–05 lb per MMBtu of heat input). | – |

3. Pulverized coal boilers designed to burn coal/solid fossil fuel.

a. CO (or CEMS) | 130 ppm by volume on a dry basis corrected to 3 percent oxygen, 3-run average; or (320 ppm by volume on a dry basis corrected to 3 percent oxygen; 30-day rolling average). | – |

198
<table>
<thead>
<tr>
<th>Boiler Type</th>
<th>CO Emissions</th>
<th>Filterable PM Emissions</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Stokers/others designed to burn coal/solid fossil fuel.</td>
<td>a. CO (or CEMS)</td>
<td>(160 \text{ ppm by volume on a dry basis corrected to 3 percent oxygen, 3-run average; or (340 ppm by volume on a dry basis corrected to 3 percent oxygen, c 30-day rolling average).})</td>
</tr>
<tr>
<td></td>
<td>b. Filterable PM (or TSM)</td>
<td>(0.14 \text{ lb per MMBtu of steam output or 1.7 lb per MWh; 3-run average.})</td>
</tr>
<tr>
<td>2. Fluidized bed units designed to burn coal/solid fossil fuel.</td>
<td>a. CO (or CEMS)</td>
<td>(130 \text{ ppm by volume on a dry basis corrected to 3 percent oxygen, 3-run average; or (230 ppm by volume on a dry basis corrected to 3 percent oxygen, c 30-day rolling average).})</td>
</tr>
<tr>
<td></td>
<td>b. Filterable PM (or TSM)</td>
<td>(0.12 \text{ lb per MMBtu of steam output or 1.4 lb per MWh; 3-run average.})</td>
</tr>
<tr>
<td>3. Fluidized bed units with an integrated heat exchanger designed to burn coal/solid fossil fuel.</td>
<td>a. CO (or CEMS)</td>
<td>(140 \text{ ppm by volume on a dry basis corrected to 3 percent oxygen, 3-run average; or (150 ppm by volume on a dry basis corrected to 3 percent oxygen, c 30-day rolling average).})</td>
</tr>
<tr>
<td></td>
<td>b. Filterable PM (or TSM)</td>
<td>(1.3 \times 10^{-1} \text{ lb per MMBtu of steam output or 1.5 lb per MWh; 3-run average.})</td>
</tr>
<tr>
<td>4. Stokers/sloped grate/others designed to burn wet biomass fuel.</td>
<td>a. CO (or CEMS)</td>
<td>(1,500 \text{ ppm by volume on a dry basis corrected to 3 percent oxygen, 3-run average; or (720 ppm by volume on a dry basis corrected to 3 percent oxygen, c 30-day rolling average).})</td>
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<tr>
<td></td>
<td>b. Filterable PM (or TSM)</td>
<td>(1.4 \text{ lb per MMBtu of steam output or 17 lb per MWh; 3-run average.})</td>
</tr>
<tr>
<td>5. Stokers/sloped grate/others designed to burn kiln-dried biomass fuel.</td>
<td>a. CO</td>
<td>(460 \text{ ppm by volume on a dry basis corrected to 3 percent oxygen.})</td>
</tr>
<tr>
<td></td>
<td>b. Filterable PM (or TSM)</td>
<td>(4.2 \times 10^{-1} \text{ lb per MMBtu of steam output or 5.1 lb per MWh.})</td>
</tr>
<tr>
<td>6. Fluidized bed units designed to burn biomass/bio-based solid.</td>
<td>a. CO (or CEMS)</td>
<td>(470 \text{ ppm by volume on a dry basis corrected to 3 percent oxygen, 3-run average; or (310 ppm by volume on a dry basis corrected to 3 percent oxygen, c 30-day rolling average).})</td>
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<td>b. Filterable PM (or TSM)</td>
<td>(4.6 \times 10^{-1} \text{ lb per MMBtu of steam output or 5.2 lb per MWh; 3-run average.})</td>
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</tbody>
</table>
### Table 2

<table>
<thead>
<tr>
<th>If your boiler or process heater is in this subcategory</th>
<th>For the following pollutants . . .</th>
<th>The emissions must not exceed the following emission limits, except during startup and shutdown . . .</th>
<th>The emissions must not exceed the following alternative output-based limits, except during startup and shutdown . . .</th>
<th>Using this specified sampling volume or test run duration . . .</th>
</tr>
</thead>
<tbody>
<tr>
<td>b. Filterable PM (or TSM).</td>
<td>1.1E–01 lb per MMBtu of heat input; or (1.2E–03 lb per MMBtu of heat input).</td>
<td>1.4E–01 lb per MMBtu of steam output or 1.6 lb per MWh; or (1.5E–03 lb per MMBtu of steam output or 1.7E–02 lb per MWh).</td>
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<td></td>
<td>1.9 lb per MMBtu of steam output or 27 lb per MWh; 3-run average.</td>
<td>Collect a minimum of 1 dscm per run.</td>
<td>1 hr minimum sampling time.</td>
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</tr>
<tr>
<td>10. Suspension burners designed to burn biomass/bio-based solid.</td>
<td>a. CO (or CEMS) 2.400 ppm by volume on a dry basis corrected to 3 percent oxygen, 3-run average; or (2.000 ppm by volume on a dry basis corrected to 3 percent oxygen, 10-day rolling average).</td>
<td>5.2E–02 lb per MMBtu of steam output or 7.1E–01 lb per MWh; or (6.6E–03 lb per MMBtu of steam output or 9.1E–02 lb per MWh).</td>
<td>Collect a minimum of 2 dscm per run.</td>
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<tr>
<td></td>
<td>b. Filterable PM (or TSM). 5.1E–02 lb per MMBtu of heat input; or (6.5E–03 lb per MMBtu of heat input).</td>
<td>8.4E–01 lb per MMBtu of steam output or 8.4 lb per MWh; 3-run average.</td>
<td>1 hr minimum sampling time.</td>
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<tr>
<td>11. Dutch Ovens/Pile burners designed to burn biomass/bio-based solid.</td>
<td>a. CO (or CEMS) 770 ppm by volume on a dry basis corrected to 3 percent oxygen, 3-run average; or (520 ppm by volume on a dry basis corrected to 3 percent oxygen, 10-day rolling average).</td>
<td>3.9E–01 lb per MMBtu of steam output or 3.9 lb per MWh; or (2.8E–03 lb per MMBtu of steam output or 2.8E–02 lb per MWh).</td>
<td>Collect a minimum of 1 dscm per run.</td>
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<td></td>
<td>b. Filterable PM (or TSM). 2.8E–01 lb per MMBtu of heat input; or (2.0E–03 lb per MMBtu of heat input).</td>
<td>2.4 lb per MMBtu of steam output or 12 lb per MWh.</td>
<td>1 hr minimum sampling time.</td>
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<tr>
<td>12. Fuel cell units designed to burn biomass/bio-based solid.</td>
<td>a. CO 1.100 ppm by volume on a dry basis corrected to 3 percent oxygen.</td>
<td>5.5E–02 lb per MMBtu of steam output or 2.8E–01 lb per MWh; or (1.6E–02 lb per MMBtu of steam output or 8.1E–02 lb per MWh).</td>
<td>Collect a minimum of 2 dscm per run.</td>
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<tr>
<td></td>
<td>b. Filterable PM (or TSM). 2.0E–02 lb per MMBtu of heat input; or (5.8E–03 lb per MMBtu of heat input).</td>
<td>3.5 lb per MMBtu of steam output or 39 lb per MWh; 3-run average.</td>
<td>1 hr minimum sampling time.</td>
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</tr>
<tr>
<td>13. Hybrid suspension grate units designed to burn biomass/bio-based solid.</td>
<td>a. CO (or CEMS) 3.500 ppm by volume on a dry basis corrected to 3 percent oxygen, 3-run average; or (900 ppm by volume on a dry basis corrected to 3 percent oxygen, 30-day rolling average).</td>
<td>5.5E–01 lb per MMBtu of steam output or 6.2 lb per MWh; or (5.7E–04 lb per MMBtu of steam output or 6.3E–03 lb per MWh).</td>
<td>Collect a minimum of 1 dscm per run.</td>
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<tr>
<td></td>
<td>b. Filterable PM (or TSM). 4.4E–01 lb per MMBtu of heat input; or (4.5E–04 lb per MMBtu of heat input).</td>
<td>Collect a minimum of 2 dscm per run.</td>
<td>1 hr minimum sampling time.</td>
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<td>Table 2</td>
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<tr>
<td><strong>If your boiler or process heater is in this subcategory . . .</strong></td>
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<td>The emissions must not exceed the following emission limits, except during startup and shutdown . . .</td>
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<tr>
<td>The emissions must not exceed the following alternative output-based limits, except during startup and shutdown . . .</td>
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<tr>
<td>Using this specified sampling volume or test run duration . . .</td>
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<td>----------------------------------------------------------------------</td>
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<tr>
<td>14. Units designed to burn liquid fuel.</td>
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<tr>
<td>a. HCl ........................... 1.1E–03 lb per MMBtu of heat input.</td>
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<tr>
<td>1.4E–03 lb per MMBtu of steam output or 1.6E–02 lb per MWh.</td>
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<tr>
<td>For M26A, collect a minimum of 2 dscm per run; for M26, collect a minimum of 240 liters per run.</td>
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<tr>
<td>b. Mercury .................... 2.0E–06 lb per MMBtu of heat input.</td>
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<tr>
<td>2.5E–06 lb per MMBtu of steam output or 2.8E–05 lb per MWh.</td>
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<tr>
<td>For M29, collect a minimum of 3 dscm per run; for M30A or M30B, collect a minimum sample as specified in the method; for ASTM D6784, collect a minimum of 2 dscm.</td>
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<tr>
<td>15. Units designed to burn heavy liquid fuel.</td>
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</tr>
<tr>
<td>a. CO ........................... 130 ppm by volume on a dry basis corrected to 3 percent oxygen, 3-run average.</td>
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<td></td>
<td></td>
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</tr>
<tr>
<td>0.13 lb per MMBtu of steam output or 1.4 lb per MWh; 3-run average.</td>
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<tr>
<td>Collect a minimum of 1 dscm per run.</td>
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<tr>
<td>b. Filterable PM (or TSM),</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6.2E–02 lb per MMBtu of heat input; or (2.0E–04 lb per MMBtu of steam output).</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7.5E–02 lb per MMBtu of steam output or 8.6E–01 lb per MWh; or (2.5E–04 lb per MMBtu of steam output or 2.8E–03 lb per MWh).</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 hr minimum sampling time.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>16. Units designed to burn light liquid fuel.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. CO ........................... 130 ppm by volume on a dry basis corrected to 3 percent oxygen.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0.13 lb per MMBtu of steam output or 1.4 lb per MWh.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Collect a minimum of 3 dscm per run.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>b. Filterable PM (or TSM),</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7.9E–03 lb per MMBtu of heat input; or (6.2E–05 lb per MMBtu of heat input).</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9.6E–03 lb per MMBtu of steam output or 1.1E–01 lb per MWh; or (7.5E–05 lb per MMBtu of steam output or 8.6E–04 lb per MWh).</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 hr minimum sampling time.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>17. Units designed to burn liquid fuel that are non-continental units.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. CO ........................... 130 ppm by volume on a dry basis corrected to 3 percent oxygen, 3-run average based on stack test.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0.13 lb per MMBtu of steam output or 1.4 lb per MWh; 3-run average.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Collect a minimum of 2 dscm per run.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>b. Filterable PM (or TSM),</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.7E–01 lb per MMBtu of heat input; or (8.6E–04 lb per MMBtu of heat input).</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.3E–01 lb per MMBtu of steam output or 3.8 lb per MWh; or (1.1E–03 lb per MMBtu of steam output or 1.2E–02 lb per MWh).</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 hr minimum sampling time.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18. Units designed to burn gas 2 (other) gases.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. CO ........................... 130 ppm by volume on a dry basis corrected to 3 percent oxygen.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0.16 lb per MMBtu of steam output or 1.0 lb per MWh.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>For M29, collect a minimum of 2 dscm per run; for M30A, collect a minimum of 240 liters per run.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>b. HCl ........................... 1.7E–03 lb per MMBtu of heat input.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.9E–03 lb per MMBtu of steam output or 1.8E–02 lb per MWh.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>For M26A, collect a minimum of 2 dscm per run; for M26, collect a minimum of 240 liters per run.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>c. Mercury .................... 7.5E–06 lb per MMBtu of heat input.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.4E–05 lb per MMBtu of steam output or 8.3E–05 lb per MWh.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table 3 to Subpart DDDDD of Part 63—Work Practice Standards

As stated in §63.7500, you must comply with the following applicable work practice standards:

<table>
<thead>
<tr>
<th>If your unit is . . .</th>
<th>You must meet the following . . .</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. A new or existing boiler or process heater with a continuous oxygen trim system that maintains an optimum air to fuel ratio, or a heat input capacity of less than or equal to 5 million Btu per hour in any of the following subcategories: unit designed to burn gas 1; unit designed to burn gas 2 (other); or unit designed to burn light liquid, or a limited use boiler or process heater.</td>
<td>Conduct a tune-up of the boiler or process heater every 5 years as specified in §63.7540.</td>
</tr>
<tr>
<td>2. A new or existing boiler or process heater without a continuous oxygen trim system and with heat input capacity of less than 10 million Btu per hour in the unit designed to burn heavy liquid or unit designed to burn solid fuel subcategories; or a new or existing boiler or process heater with heat input capacity of less than 10 million Btu per hour, but greater than 5 million Btu per hour, in any of the following subcategories: unit designed to burn gas 1; unit designed to burn gas 2 (other); or unit designed to burn light liquid.</td>
<td>Conduct a tune-up of the boiler or process heater biennially as specified in §63.7540.</td>
</tr>
<tr>
<td>3. A new or existing boiler or process heater without a continuous oxygen trim system and with heat input capacity of 10 million Btu per hour or greater.</td>
<td>Conduct a tune-up of the boiler or process heater annually as specified in §63.7540. Units in either the Gas 1 or Metal Process Furnace subcategories will conduct this tune-up as a work practice for all regulated emissions under this subpart. Units in all other subcategories will conduct this tune-up as a work practice for dioxins/furans.</td>
</tr>
<tr>
<td>4. An existing boiler or process heater located at a major source facility, not including limited use units.</td>
<td>Must have a one-time energy assessment performed by a qualified energy assessor. An energy assessment completed on or after January 1, 2008, that meets or is amended to meet the energy assessment requirements in this table, satisfies the energy assessment requirement. A facility that operated under an energy management program developed according to the ENERGY STAR guidelines for energy management or compatible with ISO 50001 for at least one year between January 1, 2008 and the compliance date specified in §63.7495 that includes the affected units also satisfies the energy assessment requirement. The energy assessment must include the following with extent of the evaluation for items a. to e. appropriate for the on-site technical hours listed in §63.7575.</td>
</tr>
</tbody>
</table>

a. A visual inspection of the boiler or process heater system.
2. An evaluation of operating characteristics of the boiler or process heater systems, specifications of energy using systems, operating and maintenance procedures, and unusual operating constraints.

c. An inventory of major energy use systems consuming energy from affected boilers and process heaters and which are under the control of the boiler/process heater owner/operator.

d. A review of available architectural and engineering plans, facility operation and maintenance procedures and logs, and fuel usage.

e. A review of the facility’s energy management program and provide recommendations for improvements consistent with the definition of energy management program, if identified.

f. A list of cost-effective energy conservation measures that are within the facility’s control.

g. A list of the energy savings potential of the energy conservation measures identified.

h. A comprehensive report detailing the ways to improve efficiency, the cost of specific improvements, benefits, and the time frame for recouping those investments.

5. An existing or new boiler or process heater subject to emission limits in Table 1 or 2 or 11 through 13 to this subpart during startup.

a. You must operate all CMS during startup.

b. For startup of a boiler or process heater, you must use one or a combination of the following clean fuels: Natural gas, synthetic natural gas, propane, other Gas 1 fuels, distillate oil, syngas, ultra-low sulfur diesel, fuel oil-soaked rags, kerosene, hydrogen, paper, cardboard, refinery gas, liquefied petroleum gas, clean dry biomass, and any fuels meeting the appropriate HCl, mercury and TSM emission standards by fuel analysis.

c. You have the option of complying using either of the following work practice standards.

(1) If you choose to comply using definition (1) of “startup” in §63.7575, once you start firing fuels that are not clean fuels, you must vent emissions to the main stack(s) and engage all of the applicable control devices except limestone injection in fluidized bed combustion (FBC) boilers, dry scrubber, fabric filter, and selective catalytic reduction (SCR). You must start your limestone injection in FBC boilers, dry scrubber, fabric filter, and SCR systems as expeditiously as possible. Startup ends when steam or heat is supplied for any purpose.

(2) If you choose to comply using definition (2) of “startup” in §63.7575, once you start to feed fuels that are not clean fuels, you must vent emissions to the main stack(s) and engage all of the applicable control devices so as to comply with the emission limits within 4 hours of start of supplying useful thermal energy. You must engage and operate PM control within one hour of first feeding fuels that are not clean fuels. You must start all applicable control devices as expeditiously as possible, but, in any case, when necessary to comply with other standards applicable to the source by a permit limit or a rule other than this subpart that require operation of the control devices. You must develop and implement a written startup and shutdown plan, as specified in §63.7505(e).

d. You must comply with all applicable emission limits at all times except during startup and shutdown periods at which time you must meet this work practice. You must collect monitoring data during periods of startup, as specified in §63.7535(b). You must keep records during periods of startup. You must provide reports concerning activities and periods of startup, as specified in §63.7555.
If your unit is . . . You must meet the following . . .

6. An existing or new boiler or process heater subject to emission limits in Tables 1 or 2 or 11 through 13 to this subpart during shutdown.

You must operate all CMS during shutdown. While firing fuels that are not clean fuels during shutdown, you must vent emissions to the main stack(s) and operate all applicable control devices, except limestone injection in FBC boilers, dry scrubber, fabric filter, and SCR but, in any case, when necessary to comply with other standards applicable to the source that require operation of the control device.

If, in addition to the fuel used prior to initiation of shutdown, another fuel must be used to support the shutdown process, that additional fuel must be one or a combination of the following clean fuels: Natural gas, synthetic natural gas, propane, other Gas 1 fuels, distillate oil, syngas, ultra-low sulfur diesel, refinery gas, and liquefied petroleum gas.

You must comply with all applicable emission limits at all times except for startup or shutdown periods conforming with this work practice. You must collect monitoring data during periods of shutdown, as specified in §63.7535(b). You must keep records during periods of shutdown. You must provide reports concerning activities and periods of shutdown, as specified in §63.7555.

*As specified in §63.7555(d)(13), the source may request an alternative timeframe with the PM controls requirement to the permitting authority (state, local, or tribal agency) that has been delegated authority for this subpart by EPA. The source must provide evidence that (1) it is unable to safely engage and operate the PM control(s) to meet the “fuel firing + 1 hour” requirement and (2) the PM control device is appropriately designed and sized to meet the filterable PM emission limit. It is acknowledged that there may be another control device that has been installed other than ESP that provides additional PM control (e.g., scrubber).


#### TABLE 4 TO SUBPART DDDDD OF PART 63—OPERATING LIMITS FOR BOILERS AND PROCESS HEATERS

As stated in §63.7500, you must comply with the applicable operating limits:

<table>
<thead>
<tr>
<th>Table 4 to Subpart DDDDD of Part 63—Operating Limits for Boilers and Process Heaters</th>
</tr>
</thead>
<tbody>
<tr>
<td>When complying with a Table 1, 2, 11, 12, or 13 numerical emission limit using . . .</td>
</tr>
<tr>
<td>You must meet these operating limits . . .</td>
</tr>
</tbody>
</table>

1. Wet PM scrubber control on a boiler or process heater not using a PM CPMS.

Maintain the 30-day rolling average pressure drop and the 30-day rolling average liquid flow rate at or above the lowest one-hour average pressure drop and the lowest one-hour average liquid flow rate, respectively, measured during the performance test demonstrating compliance with the PM emission limitation according to §63.7530(b) and Table 7 to this subpart.

2. Wet acid gas (HCl) scrubber* control on a boiler or process heater not using a HCl CEMS.

Maintain the 30-day rolling average effluent pH at or above the lowest one-hour average pH and the 30-day rolling average liquid flow rate at or above the lowest one-hour average liquid flow rate measured during the performance test demonstrating compliance with the HCl emission limitation according to §63.7530(b) and Table 7 to this subpart.

3. Fabric filter control on a boiler or process heater not using a PM CPMS.

a. Maintain opacity to less than or equal to 10 percent opacity or the highest hourly average opacity reading measured during the performance test run demonstrating compliance with the PM (or TSM) emission limitation (daily block average); or
b. Install and operate a bag leak detection system according to §63.7525 and operate the fabric filter such that the bag leak detection system alert is not activated more than 5 percent of the operating time during each 6-month period.

4. Electrostatic precipitator control on a boiler or process heater not using a PM CPMS.

a. This option is for boilers and process heaters that operate dry control systems (i.e., an ESP without a wet scrubber). Existing and new boilers and process heaters must maintain opacity to less than or equal to 10 percent opacity or the highest hourly average opacity reading measured during the performance test run demonstrating compliance with the PM (or TSM) emission limitation (daily block average).
b. This option is only for boilers and process heaters not subject to PM CPMS or continuous compliance with an opacity limit (i.e., dry ESP). Maintain the 30-day rolling average total secondary electric power input of the electrostatic precipitator at or above the operating limits established during the performance test according to §63.7530(b) and Table 7 to this subpart.
When complying with a Table 1, 2, 11, 12, or 13 numerical emission limit using . . . You must meet these operating limits . . .

5. Dry scrubber or carbon injection control on a boiler or process heater not using a mercury CEMS. Maintain the minimum sorbent or carbon injection rate as defined in §63.7575 of this subpart.

6. Any other add-on air pollution control type on a boiler or process heater not using a PM CPMS. This option is for boilers and process heaters that operate dry control systems. Existing and new boilers and process heaters must maintain opacity to less than or equal to 10 percent opacity or the highest hourly average opacity reading measured during the performance test run demonstrating compliance with the PM (or TSM) emission limitation (daily block average).

7. Performance testing For boilers and process heaters that demonstrate compliance with a performance test, maintain the 30-day rolling average operating load of each unit such that it does not exceed 110 percent of the highest hourly average operating load recorded during the performance test.

8. Oxygen analyzer system For boilers and process heaters subject to a CO emission limit that demonstrate compliance with an O\textsubscript{2} analyzer system as specified in §63.7525(a), maintain the 30-day rolling average oxygen content at or above the lowest hourly average oxygen concentration measured during the CO performance test, as specified in Table 8. This requirement does not apply to units that install an oxygen trim system since these units will set the trim system to the level specified in §63.7525(a).

9. SO\textsubscript{2} CEMS For boilers or process heaters subject to an HCl emission limit that demonstrate compliance with an SO\textsubscript{2} CEMS, maintain the 30-day rolling average SO\textsubscript{2} emission rate at or below the highest hourly average SO\textsubscript{2} concentration measured during the HCl performance test, as specified in Table 8.

*A wet acid gas scrubber is a control device that removes acid gases by contacting the combustion gas with an alkaline slurry or solution. Alkaline reagents include, but not limited to, lime, limestone and sodium.

Table 5 to Subpart DDDDD of Part 63—Performance Testing Requirements

As stated in §63.7520, you must comply with the following requirements for performance testing for existing, new or reconstructed affected sources:

<table>
<thead>
<tr>
<th>To conduct a performance test for the following pollutant . . .</th>
<th>You must . . .</th>
<th>Using, as appropriate . . .</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1. Filterable PM</strong>-------------------------------------------</td>
<td>a. Select sampling ports location and the number of traverse points.&lt;br&gt;b. Determine velocity and volumetric flow-rate of the stack gas.&lt;br&gt;c. Determine oxygen or carbon dioxide concentration of the stack gas.&lt;br&gt;d. Measure the moisture content of the stack gas.&lt;br&gt;e. Measure the PM emission concentration&lt;br&gt;f. Convert emissions concentration to lb per MMBtu emission rates.</td>
<td>Method 1 at 40 CFR part 60, appendix A–1 of this chapter.&lt;br&gt;Method 2, 2F, or 2G at 40 CFR part 60, appendix A–1 or A–2 to part 60 of this chapter.&lt;br&gt;Method 3A or 3B at 40 CFR part 60, appendix A–2 to part 60 of this chapter, or ANSI/ASME PTC 19.10–1981.&lt;br&gt;Method 4 at 40 CFR part 60, appendix A–3 of this chapter.&lt;br&gt;Method 5 or 17 (positive pressure fabric filters must use Method SD) at 40 CFR part 60, appendix A–3 or A–6 of this chapter.&lt;br&gt;Method 19 F-factor methodology at 40 CFR part 60, appendix A–7 of this chapter.</td>
</tr>
</tbody>
</table>
| **2. TSM**---------------------------------------------------| a. Select sampling ports location and the number of traverse points.<br>b. Determine velocity and volumetric flow-rate of the stack gas.<br>c. Determine oxygen or carbon dioxide concentration of the stack gas.<br>d. Measure the moisture content of the stack gas.<br>e. Measure the TSM emission concentration<br>f. Convert emissions concentration to lb per MMBtu emission rates. | Method 1 at 40 CFR part 60, appendix A–1 of this chapter.<br>Method 2, 2F, or 2G at 40 CFR part 60, appendix A–1 or A–2 to part 60 of this chapter.<br>Method 3A or 3B at 40 CFR part 60, appendix A–1 of this chapter, or ANSI/ASME PTC 19.10–1981.<br>Method 4 at 40 CFR part 60, appendix A–3 of this chapter.<br>Method 29 at 40 CFR part 60, appendix A–8 of this chapter.<br>Method 19 F-factor methodology at 40 CFR part 60, appendix A–7 of this chapter.
To conduct a performance test for the following pollutant . . . You must . . . Using, as appropriate . . .

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>Method 1</th>
<th>Method 2, 2F, or 2G</th>
<th>Method 3A or 3B</th>
<th>Method 4</th>
<th>Method 26 or 26A</th>
<th>Method 19</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hydrogen chloride</td>
<td>1 at 40 CFR part 60, appendix A–1 of this chapter</td>
<td>3 at 40 CFR part 60, appendix A–2 of this chapter, or ANSI/ASME PTC 19.10–1981. (a)</td>
<td>4 at 40 CFR part 60, appendix A–3 of this chapter</td>
<td>2 at 40 CFR part 60, appendix A–8 of this chapter</td>
<td>29, 30A, or 30B (M29, M30A, or M30B)</td>
<td>19 F-factor methodology</td>
</tr>
<tr>
<td>Mercury</td>
<td>1 at 40 CFR part 60, appendix A–1 of this chapter</td>
<td>2, 2F, or 2G at 40 CFR part 60, appendix A–1 or A–2 of this chapter</td>
<td>3A or 3B at 40 CFR part 60, appendix A–1 of this chapter, or ANSI/ASME PTC 19.10–1981. (a)</td>
<td>4 at 40 CFR part 60, appendix A–3 of this chapter</td>
<td>26 or 26A (M26 or M26A) at 40 CFR part 60, appendix A–8 of this chapter</td>
<td>19 F-factor methodology at 40 CFR part 60, appendix A–7 of this chapter</td>
</tr>
<tr>
<td>CO</td>
<td>1 at 40 CFR part 60, appendix A–1 of this chapter</td>
<td>2, 2F, or 2G at 40 CFR part 60, appendix A–1 or A–2 of this chapter</td>
<td>3A or 3B at 40 CFR part 60, appendix A–1 of this chapter, or ANSI/ASME PTC 19.10–1981. (a)</td>
<td>4 at 40 CFR part 60, appendix A–3 of this chapter</td>
<td>Method 101A at 40 CFR part 61, appendix B of this chapter, or ASTM Method D6784. (a)</td>
<td>19 F-factor methodology at 40 CFR part 60, appendix A–7 of this chapter</td>
</tr>
</tbody>
</table>

\(a\) Incorporated by reference, see § 63.14.

### Environmental Protection Agency

#### Pt. 63, Subpt. DDDD, Table 6

To conduct a fuel analysis for the following pollutant . . .

<table>
<thead>
<tr>
<th>Step</th>
<th>Description</th>
<th>Method/Standard</th>
</tr>
</thead>
<tbody>
<tr>
<td>e.</td>
<td>Determine moisture content of the fuel type.</td>
<td>ASTM D3173, ASTM E871, ASTM D5864, ASTM D240, or ASTM D95 (for liquid fuels), or ASTM D4006 (for liquid fuels), or equivalent.</td>
</tr>
<tr>
<td>f.</td>
<td>Measure mercury concentration in fuel sample.</td>
<td>ASTM D6722 (for coal), EPA SW-846-7471B (for solid samples), or EPA SW-846-7470A (for liquid samples), or EPA 821-R-01-013 (for liquid or solid), or equivalent.</td>
</tr>
<tr>
<td>g.</td>
<td>Convert concentration into units of pounds of mercury per MMBtu of heat content.</td>
<td>For fuel mixtures use Equation 8 in §63.7530.</td>
</tr>
</tbody>
</table>

2. **HCl**

<table>
<thead>
<tr>
<th>Step</th>
<th>Description</th>
<th>Method/Standard</th>
</tr>
</thead>
<tbody>
<tr>
<td>a.</td>
<td>Collect fuel samples</td>
<td>Procedure in §63.7521(c) or ASTM D5192, ASTM D7430, ASTM D6883, ASTM D2234/D2234M (for coal), or ASTM D6323 (for coal or biomass), ASTM D4177 (for liquid fuels), or ASTM D4057 (for liquid fuels), or equivalent.</td>
</tr>
<tr>
<td>b.</td>
<td>Composite fuel samples</td>
<td>Procedure in §63.7521(d) or equivalent.</td>
</tr>
<tr>
<td>c.</td>
<td>Prepare composited fuel samples</td>
<td>EPA SW-846-3050B (for solid samples), ASTM D2013/D2013M (for coal), or ASTM D5198 (for biomass), or EPA 3050 (for solid fuels), or equivalent.</td>
</tr>
<tr>
<td>d.</td>
<td>Determine heat content of the fuel type.</td>
<td>ASTM D5865 (for coal) or ASTM E711 (for biomass), ASTM D5864, ASTM D240, or equivalent.</td>
</tr>
<tr>
<td>e.</td>
<td>Determine moisture content of the fuel type.</td>
<td>ASTM D3173, ASTM E871, ASTM D5864, ASTM D240, or ASTM D95 (for liquid fuels), or ASTM D4006 (for liquid fuels), or equivalent.</td>
</tr>
<tr>
<td>f.</td>
<td>Measure chlorine concentration in fuel sample.</td>
<td>EPA SW-846-9265, ASTM D6721, ASTM D4208 (for coal), or EPA SW-846-550 (for solid fuels), or EPA SW-846-9056 or SW-846-9076 (for solids or liquids), or equivalent.</td>
</tr>
<tr>
<td>g.</td>
<td>Convert concentrations into units of pounds of HCl per MMBtu of heat content.</td>
<td>For fuel mixtures use Equation 7 in §63.7530 and convert from chlorine to HCl by multiplying by 1.028.</td>
</tr>
</tbody>
</table>

3. **Mercury Fuel Specification for other gas 1 fuels.**

<table>
<thead>
<tr>
<th>Step</th>
<th>Description</th>
<th>Method/Standard</th>
</tr>
</thead>
<tbody>
<tr>
<td>a.</td>
<td>Collect fuel samples</td>
<td>Procedure in §63.7521(c) or ASTM D5192, ASTM D7430, ASTM D6883, ASTM D2234/D2234M (for coal), or ASTM D6323 (for coal or biomass), or ASTM D4177 (for liquid fuels), or ASTM D4057 (for liquid fuels), or equivalent.</td>
</tr>
<tr>
<td>b.</td>
<td>Composite fuel samples</td>
<td>Procedure in §63.7521(d) or equivalent.</td>
</tr>
<tr>
<td>c.</td>
<td>Prepare composited fuel samples</td>
<td>EPA SW-846-3050B (for solid samples), ASTM D2013/D2013M (for coal), or ASTM D5198 (for biomass), or EPA 3050 (for solid fuels), or equivalent.</td>
</tr>
<tr>
<td>d.</td>
<td>Determine heat content of the fuel type.</td>
<td>ASTM D5865 (for coal) or ASTM E711 (for biomass), or ASTM D5864, ASTM D240, or equivalent.</td>
</tr>
<tr>
<td>e.</td>
<td>Determine moisture content of the fuel type.</td>
<td>ASTM D3173, ASTM E871, ASTM D5864, ASTM D240, or ASTM D95 (for liquid fuels), or ASTM D4006 (for liquid fuels), or equivalent.</td>
</tr>
<tr>
<td>f.</td>
<td>Measure chlorine concentration in fuel sample.</td>
<td>EPA SW-846-9265, ASTM D6721, ASTM D4208 (for coal), or EPA SW-846-550 (for solid fuels), or EPA SW-846-9056 or SW-846-9076 (for solids or liquids), or equivalent.</td>
</tr>
<tr>
<td>g.</td>
<td>Convert concentrations into units of pounds of HCl per MMBtu of heat content.</td>
<td>For fuel mixtures use Equation 7 in §63.7530 and convert from chlorine to HCl by multiplying by 1.028.</td>
</tr>
</tbody>
</table>

4. **TSM**

<table>
<thead>
<tr>
<th>Step</th>
<th>Description</th>
<th>Method/Standard</th>
</tr>
</thead>
<tbody>
<tr>
<td>a.</td>
<td>Collect fuel samples</td>
<td>Procedure in §63.7521(c) or ASTM D5192, ASTM D7430, ASTM D6883, ASTM D2234/D2234M (for coal), or ASTM D6323 (for coal or biomass), or ASTM D4177 (for liquid fuels), or ASTM D4057 (for liquid fuels), or equivalent.</td>
</tr>
<tr>
<td>b.</td>
<td>Composite fuel samples</td>
<td>Procedure in §63.7521(d) or equivalent.</td>
</tr>
<tr>
<td>c.</td>
<td>Prepare composited fuel samples</td>
<td>EPA SW-846-3050B (for solid samples), ASTM D2013/D2013M (for coal), or ASTM D5198 (for biomass), or ASTM D6864 (for liquid fuels), or equivalent.</td>
</tr>
<tr>
<td>d.</td>
<td>Determine heat content of the fuel type.</td>
<td>ASTM D5865 (for coal) or ASTM E711 (for biomass), or ASTM D5864, ASTM D240, or equivalent.</td>
</tr>
<tr>
<td>e.</td>
<td>Determine moisture content of the fuel type.</td>
<td>ASTM D3173, ASTM E871, ASTM D5864, ASTM D240, or ASTM D95 (for liquid fuels), or ASTM D4006 (for liquid fuels), or equivalent.</td>
</tr>
<tr>
<td>f.</td>
<td>Measure TSM concentration in fuel sample.</td>
<td>EPA SW-846-3050B, ASTM D6864, or EPA 3050 (for liquid fuels), or EPA SW-846-550 (for solid fuels), or EPA SW-846-7740 (for selenium only).</td>
</tr>
<tr>
<td>g.</td>
<td>Convert concentrations into units of pounds of TSM per MMBtu of heat content.</td>
<td>For fuel mixtures use Equation 9 in §63.7530.</td>
</tr>
</tbody>
</table>

---

* Incorporates reference, see §63.14.
As stated in §63.7520, you must comply with the following requirements for establishing operating limits:

<table>
<thead>
<tr>
<th>If you have an applicable emission limit for</th>
<th>And your operating limits are based on . . .</th>
<th>You must . . .</th>
<th>Using . . .</th>
<th>According to the following requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. PM, TSM, or mercury.</td>
<td>a. Wet scrubber operating parameters.</td>
<td>i. Establish a site-specific minimum scrubber pressure drop and minimum flow rate operating limit according to §63.7530(b).</td>
<td>(1) Data from the scrubber pressure drop and liquid flow rate monitors and the PM, TSM, or mercury performance test.</td>
<td>(a) You must collect scrubber pressure drop and liquid flow rate data every 15 minutes during the entire period of the performance tests. (b) Determine the lowest hourly average scrubber pressure drop and liquid flow rate by computing the hourly averages using all of the 15-minute readings taken during each performance test.</td>
</tr>
<tr>
<td></td>
<td>b. Electrostatic precipitator operating parameters (option only for units that operate wet scrubbers).</td>
<td>i. Establish a site-specific minimum total secondary electric power input according to §63.7530(b).</td>
<td>(1) Data from the voltage and secondary amperage monitors during the PM or mercury performance test.</td>
<td>(a) You must collect secondary voltage and secondary amperage for each ESP cell and calculate total secondary electric power input data every 15 minutes during the entire period of the performance tests. (b) Determine the average total secondary electric power input by computing the hourly averages using all of the 15-minute readings taken during each performance test.</td>
</tr>
<tr>
<td></td>
<td>c. Opacity</td>
<td>i. Establish a site-specific maximum opacity level.</td>
<td>(1) Data from the opacity monitoring system during the PM performance test.</td>
<td>(a) You must collect opacity readings every 15 minutes during the entire period of the performance tests. (b) Determine the average hourly opacity reading for each performance test by computing the hourly averages using all of the 15-minute readings taken during each performance test run. (c) Determine the highest hourly average opacity reading measured during the test run demonstrating compliance with the PM (or TSM) emission limitation.</td>
</tr>
</tbody>
</table>
| If you have an applicable emission limit for  
<table>
<thead>
<tr>
<th>And your operating limits are based on . . .</th>
<th>You must . . .</th>
<th>Using . . .</th>
<th>According to the following requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. HCl ..................................</td>
<td>a. Wet scrubber operating parameters.</td>
<td>i. Establish site-specific minimum effluent pH and flow rate operating limits according to § 63.7530(b).</td>
<td>(1) Data from the pH and liquid flow-rate monitors and the HCl performance test.</td>
</tr>
<tr>
<td>b. Dry scrubber operating parameters.</td>
<td>i. Establish a site-specific minimum sorbent injection rate operating limit according to § 63.7530(b). If different acid gas sorbents are used during the HCl performance test, the average value for each sorbent becomes the site-specific operating limit for that sorbent.</td>
<td>(1) Data from the sorbent injection rate monitors and HCl or mercury performance test.</td>
<td>(a) You must collect sorbent injection rate data every 15 minutes during the entire period of the performance tests.</td>
</tr>
<tr>
<td>c. Alternative Maximum SO₂ emission rate.</td>
<td>i. Establish a site-specific maximum SO₂ emission rate operating limit according to § 63.7530(b).</td>
<td>(1) Data from SO₂ CEMS and the HCl performance test.</td>
<td>(a) You must collect the SO₂ emissions data according to § 63.7525(m) during the most recent HCl performance tests.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(b) The maximum SO₂ emission rate is equal to the highest hourly average SO₂ emission measured during the most recent HCl performance tests.</td>
</tr>
<tr>
<td>If you have an applicable emission limit for . . .</td>
<td>And your operating limits are based on . . .</td>
<td>You must . . .</td>
<td>Using . . .</td>
</tr>
<tr>
<td>--------------------------------------------------</td>
<td>---------------------------------------------</td>
<td>----------------</td>
<td>------------</td>
</tr>
<tr>
<td>3. Mercury ......................................</td>
<td>a. Activated carbon injection.</td>
<td>i. Establish a site-specific minimum activated carbon injection rate operating limit according to §63.7530(b).</td>
<td>(1) Data from the activated carbon rate monitors and mercury performance test.</td>
</tr>
<tr>
<td>4. Carbon monoxide for which compliance is demonstrated by a performance test.</td>
<td>a. Oxygen .....................................</td>
<td>i. Establish a unit-specific limit for minimum oxygen level according to §63.7530(b).</td>
<td>(1) Data from the oxygen analyzer system specified in §63.7525(a).</td>
</tr>
</tbody>
</table>
Environmental Protection Agency

Pt. 63, Subpt. DDDDD, Table 8

TABLE 7 TO SUBPART DDDDD OF PART 63—ESTABLISHING OPERATING LIMITS a b—Continued

<table>
<thead>
<tr>
<th>If you have an applicable emission limit for . . .</th>
<th>And your operating limits are based on . . .</th>
<th>You must . . .</th>
<th>Using . . .</th>
<th>According to the following requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>5. Any pollutant for which compliance is demonstrated by a performance test.</td>
<td>a. Boiler or process heater operating load.</td>
<td>i. Establish a unit specific limit for maximum operating load according to §63.7520(c).</td>
<td>(1) Data from the operating load monitors or from steam generation monitors.</td>
<td>(a) You must collect operating load or steam generation data every 15 minutes during the entire period of the performance test. (b) Determine the average operating load by computing the hourly averages using all of the 15-minute readings taken during each performance test. (c) Determine the highest hourly average of the three test run averages during the performance test, and multiply this by 1.1 (110 percent) as your operating limit.</td>
</tr>
</tbody>
</table>

*Operating limits must be confirmed or reestablished during performance tests.

a If you conduct multiple performance tests, you must set the minimum liquid flow rate and pressure drop operating limits at the higher of the minimum values established during the performance tests. For a minimum oxygen level, if you conduct multiple performance tests, you must set the minimum oxygen level at the lower of the minimum values established during the performance tests.

[80 FR 72827, Nov. 20, 2015]

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

As stated in §63.7540, you must show continuous compliance with the emission limitations for each boiler or process heater according to the following:

<table>
<thead>
<tr>
<th>If you must meet the following operating limits or work practice standards . . .</th>
<th>You must demonstrate continuous compliance by . . .</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Opacity .................................................................................</td>
<td>a. Collecting the opacity monitoring system data according to §63.7525(c) and §63.7535; and</td>
</tr>
<tr>
<td></td>
<td>b. Reducing the opacity monitoring data to 6-minute averages; and</td>
</tr>
<tr>
<td></td>
<td>c. Maintaining daily block average opacity less than or equal to 10 percent or the highest hourly average opacity reading measured during the performance test run demonstrating compliance with the PM (or TSM) emission limitation.</td>
</tr>
<tr>
<td>2. PM CPMS ...............................................................................</td>
<td>a. Collecting the PM CPMS output data according to §63.7525;</td>
</tr>
<tr>
<td></td>
<td>b. Reducing the data to 30-day rolling averages; and</td>
</tr>
<tr>
<td></td>
<td>c. Maintaining the 30-day rolling average PM CPMS output data to less than the operating limit established during the performance test according to §63.7530(b)(4).</td>
</tr>
<tr>
<td>3. Fabric Filter Bag Leak Detection Operation.</td>
<td>a. Installing and operating a bag leak detection system according to §63.7525 and operating the fabric filter such that the requirements in §63.7540(a)(7) are met.</td>
</tr>
<tr>
<td>4. Wet Scrubber Pressure Drop and Liquid Flow-rate.</td>
<td>a. Collecting the pressure drop and liquid flow rate monitoring system data according to §§63.7525 and 63.7535; and</td>
</tr>
<tr>
<td></td>
<td>b. Reducing the data to 30-day rolling averages; and</td>
</tr>
<tr>
<td></td>
<td>c. Maintaining the 30-day rolling average pressure drop and liquid flow-rate at or above the operating limits established during the performance test according to §63.7530(b).</td>
</tr>
<tr>
<td>5. Wet Scrubber pH .....................................................................</td>
<td>a. Collecting the pH monitoring system data according to §§63.7525 and 63.7535; and</td>
</tr>
<tr>
<td></td>
<td>b. Reducing the data to 30-day rolling averages; and</td>
</tr>
<tr>
<td></td>
<td>c. Maintaining the 30-day rolling average pH at or above the operating limit established during the performance test according to §63.7530(b).</td>
</tr>
<tr>
<td>6. Dry Scrubber Sorbent or Carbon Injection Rate.</td>
<td>a. Collecting the sorbent or carbon injection rate monitoring system data for the dry scrubber according to §§63.7525 and 63.7535; and</td>
</tr>
<tr>
<td></td>
<td>b. Reducing the data to 30-day rolling averages; and</td>
</tr>
</tbody>
</table>
|                                                                                   | c. Maintaining the 30-day rolling average sorbent or carbon injection rate at or above the minimum sorbent or carbon injection rate as defined in §63.7575.
If you must meet the following operating limits or work practice standards . . . You must demonstrate continuous compliance by . . .

   a. Collecting the total secondary electric power input monitoring system data for the electrostatic precipitator according to §§ 63.7525 and 63.7535; and
   b. Reducing the data to 30-day rolling averages; and
   c. Maintaining the 30-day rolling average total secondary electric power input at or above the operating limits established during the performance test according to §63.7530(b).
      a. Conduct monthly fuel analysis for HCl or mercury or TSM according to Table 6 to this subpart; and
      b. Reduce the data to 12-month rolling averages; and
      c. Maintain the 12-month rolling average at or below the applicable emission limit for HCl or mercury or TSM in Tables 1 and 2 or 11 through 13 to this subpart.
      d. Calculate the HCI, mercury, and/or TSM emission rate from the boiler or process heater in units of lb/MMBtu using Equation 15 and Equations 17, 18, and/or 19 in §63.7530.
      a. Continuously monitor the oxygen content using an oxygen analyzer system according to §63.7525(a). This requirement does not apply to units that install an oxygen trim system since these units will set the trim system to the level specified in §63.7525(a)(7).
      b. Reducing the data to 30-day rolling averages; and
      c. Maintain the 30-day rolling average oxygen content at or above the lowest hourly average oxygen level measured during the CO performance test.

10. Boiler or process heater operating load
    a. Collecting operating load data or steam generation data every 15 minutes.
    b. Reducing the data to 30-day rolling averages; and
    c. Maintaining the 30-day rolling average operating load such that it does not exceed 110 percent of the highest hourly average operating load recorded during the performance test according to §63.7520(c).

11. SO2 emissions using SO2 CEMS . . .
    a. Collecting the SO2 CEMS output data according to §63.7525; and
    b. Reducing the data to 30-day rolling averages; and
    c. Maintaining the 30-day rolling average SO2 CEMS emission rate to a level at or below the highest hourly SO2 rate measured during the HCl performance test according to §63.7530.


TABLE 9 TO SUBPART DDDDD OF PART 63—REPORTING REQUIREMENTS

As stated in §63.7550, you must comply with the following requirements for reports:

<table>
<thead>
<tr>
<th>You must submit a(n)</th>
<th>The report must contain . . .</th>
<th>You must submit the report . . .</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Compliance report .</td>
<td>a. Information required in §63.7550(c)(1) through (5); and</td>
<td>Semiannually, annually, biennially, or every 5 years according to the requirements in §63.7550(b).</td>
</tr>
<tr>
<td></td>
<td>b. If there are no deviations from any emission limitation (emission limit and operating limit) that applies to you and there are no deviations from the requirements for work practice standards for periods of startup and shutdown in Table 3 to this subpart that apply to you, a statement that there were no deviations from the emission limitations and work practice standards during the reporting period. If there were no periods during which the CMSs, including continuous emissions monitoring system, continuous opacity monitoring system, and operating parameter monitoring systems, were out of control as specified in §63.8(c)(7), a statement that there were no periods during which the CMSs were out of control during the reporting period; and</td>
<td></td>
</tr>
<tr>
<td></td>
<td>c. If you have a deviation from any emission limitation (emission limit and operating limit) where you are not using a CMS to comply with that emission limit or operating limit, or a deviation from a work practice standard for periods of startup and shutdown, during the reporting period, the report must contain the information in §63.7550(d); and</td>
<td></td>
</tr>
<tr>
<td></td>
<td>d. If there were periods during which the CMSs, including continuous emissions monitoring system, continuous opacity monitoring system, and operating parameter monitoring systems, were out of control as specified in §63.8(c)(7), or otherwise not operating, the report must contain the information in §63.7550(e).</td>
<td></td>
</tr>
</tbody>
</table>

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

As stated in §63.7565, you must comply with the applicable General Provisions according to the following:

<table>
<thead>
<tr>
<th>Citation</th>
<th>Subject</th>
<th>Applies to subpart DDDDD</th>
</tr>
</thead>
<tbody>
<tr>
<td>§ 63.1</td>
<td>Applicability</td>
<td>Yes.</td>
</tr>
<tr>
<td>§ 63.2</td>
<td>Definitions</td>
<td>Yes.</td>
</tr>
<tr>
<td>§ 63.3</td>
<td>Units and Abbreviations</td>
<td>Yes.</td>
</tr>
<tr>
<td>§ 63.4</td>
<td>Prohibited Activities and Circumvention</td>
<td>Yes.</td>
</tr>
<tr>
<td>§ 63.5</td>
<td>Preconstruction Review and Notification Requirements</td>
<td>Yes.</td>
</tr>
<tr>
<td>§ 63.6(a), (b)(1)–(b)(5), (b)(7), (c)</td>
<td>Compliance with Standards and Maintenance Requirements</td>
<td>Yes.</td>
</tr>
<tr>
<td>§ 63.6(e)(1)(i)</td>
<td>General duty to minimize emissions.</td>
<td>No. See §63.7500(a)(3) for the general duty requirement.</td>
</tr>
<tr>
<td>§ 63.6(e)(1)(ii)</td>
<td>Requirement to correct malfunctions as soon as practicable.</td>
<td>No.</td>
</tr>
<tr>
<td>§ 63.6(f)(1)</td>
<td>Start-up, shutdown, and malfunction exemptions for compliance with non-opacity emission standards.</td>
<td>No.</td>
</tr>
<tr>
<td>§ 63.6(f)(2) and (3)</td>
<td>Compliance with non-opacity emission standards.</td>
<td>Yes.</td>
</tr>
<tr>
<td>§ 63.6(g)</td>
<td>Use of alternative standards</td>
<td>Yes, except §63.7555(d)(13) specifies the procedure for application and approval of an alternative timeframe with the PM controls requirement in the startup work practice (2).</td>
</tr>
<tr>
<td>§ 63.6(h)(1)</td>
<td>Startup, shutdown, and malfunction exemptions to opacity standards.</td>
<td>No. See §63.7500(a).</td>
</tr>
<tr>
<td>§ 63.6(h)(2) to (h)(9)</td>
<td>Determining compliance with opacity emission standards</td>
<td>No. Subpart DDDDD specifies opacity as an operating limit not an emission standard.</td>
</tr>
<tr>
<td>§ 63.6(i)</td>
<td>Extension of compliance</td>
<td>Yes. Note: Facilities may also request extensions of compliance for the installation of combined heat and power, waste heat recovery, or gas pipeline or fuel feeding infrastructure as a means of complying with this subpart.</td>
</tr>
<tr>
<td>§ 63.6(j)</td>
<td>Presidential exemption</td>
<td>Yes.</td>
</tr>
<tr>
<td>§ 63.7(a), (b), (c), and (d)</td>
<td>Performance Testing Requirements</td>
<td>Yes.</td>
</tr>
<tr>
<td>§ 63.7(e)(1)</td>
<td>Conditions for conducting performance tests</td>
<td>No. Subpart DDDDD specifies conditions for conducting performance tests at §63.7520(a) to (c).</td>
</tr>
<tr>
<td>§ 63.7(e)(2)–(e)(9), (f), (g), and (h)</td>
<td>Performance Testing Requirements</td>
<td>Yes.</td>
</tr>
<tr>
<td>§ 63.8(a) and (b)</td>
<td>Applicability and Conduct of Monitoring</td>
<td>Yes.</td>
</tr>
<tr>
<td>§ 63.8(c)(1)</td>
<td>Operation and maintenance of CMS</td>
<td>Yes.</td>
</tr>
<tr>
<td>§ 63.8(c)(1)(i)</td>
<td>General duty to minimize emissions and CMS operation</td>
<td>No. See §63.7500(a)(3).</td>
</tr>
<tr>
<td>§ 63.8(c)(1)(ii)</td>
<td>Operation and maintenance of CMS</td>
<td>Yes.</td>
</tr>
<tr>
<td>§ 63.8(c)(1)(iii)</td>
<td>Startup, shutdown, and malfunction plans for CMS</td>
<td>No.</td>
</tr>
<tr>
<td>§ 63.8(c)(2) to (c)(9)</td>
<td>Operation and maintenance of CMS</td>
<td>Yes.</td>
</tr>
<tr>
<td>§ 63.8(d)(1) and (2)</td>
<td>Monitoring Requirements, Quality Control Program</td>
<td>Yes.</td>
</tr>
<tr>
<td>§ 63.8(d)(3)</td>
<td>Written procedures for CMS</td>
<td>Yes, except for the last sentence, which refers to a startup, shutdown, and malfunction plan. Startup, shutdown, and malfunction plans are not required.</td>
</tr>
<tr>
<td>§ 63.8(e)</td>
<td>Performance evaluation of a CMS</td>
<td>Yes.</td>
</tr>
<tr>
<td>§ 63.8(f)</td>
<td>Use of an alternative monitoring method</td>
<td>Yes.</td>
</tr>
<tr>
<td>§ 63.8(g)</td>
<td>Reduction of monitoring data</td>
<td>Yes.</td>
</tr>
<tr>
<td>§ 63.9</td>
<td>Notification Requirements</td>
<td>Yes.</td>
</tr>
<tr>
<td>§ 63.10(a), (b)(1)</td>
<td>Recordkeeping and Reporting Requirements</td>
<td>Yes.</td>
</tr>
<tr>
<td>§ 63.10(b)(2)(i)</td>
<td>Recordkeeping of occurrence and duration of startups or shutdowns.</td>
<td>Yes.</td>
</tr>
<tr>
<td>Citation</td>
<td>Subject</td>
<td>Applies to subpart DDDDD</td>
</tr>
<tr>
<td>------------------</td>
<td>-------------------------------------------------------</td>
<td>--------------------------</td>
</tr>
<tr>
<td>§ 63.10(b)(2)(ii)</td>
<td>Recordkeeping of malfunctions</td>
<td>No. See § 63.755(d)(7) for recordkeeping of occurrence and duration and § 63.755(d)(8) for actions taken during malfunctions.</td>
</tr>
<tr>
<td>§ 63.10(b)(2)(iii)</td>
<td>Maintenance records</td>
<td>Yes.</td>
</tr>
<tr>
<td>§ 63.10(b)(2)(v)</td>
<td>Actions taken to minimize emissions during startup, shutdown, or malfunction.</td>
<td>No.</td>
</tr>
<tr>
<td>§ 63.10(b)(2)(vi)</td>
<td>Recordkeeping for CMS malfunctions</td>
<td>Yes.</td>
</tr>
<tr>
<td>§ 63.10(b)(2)(xvi)</td>
<td>Other CMS requirements</td>
<td>Yes.</td>
</tr>
<tr>
<td>§ 63.10(c)(10)</td>
<td>Recoringing nature and cause of malfunctions, and corrective actions.</td>
<td>No. See § 63.755(d)(7) for recordkeeping of occurrence and duration and § 63.755(d)(8) for actions taken during malfunctions.</td>
</tr>
<tr>
<td>§ 63.10(c)(12)</td>
<td>Recoringing sources with CMS</td>
<td>Yes.</td>
</tr>
<tr>
<td>§ 63.10(c)(15)</td>
<td>Use of startup, shutdown, and malfunction plan</td>
<td>No.</td>
</tr>
<tr>
<td>§ 63.10(d)(1)</td>
<td>General reporting requirements</td>
<td>Yes.</td>
</tr>
<tr>
<td>§ 63.10(d)(3)</td>
<td>Reporting opacity or visible emission observation results</td>
<td>No.</td>
</tr>
<tr>
<td>§ 63.10(d)(4)</td>
<td>Progress reports under an extension of compliance</td>
<td>Yes.</td>
</tr>
<tr>
<td>§ 63.10(d)(5)</td>
<td>Startup, shutdown, and malfunction reports</td>
<td>No. See § 63.755(d)(11) for malfunction reporting requirements.</td>
</tr>
<tr>
<td>§ 63.10(e)</td>
<td>Additional reporting requirements for sources with CMS</td>
<td>Yes.</td>
</tr>
<tr>
<td>§ 63.10(f)</td>
<td>Waiver of recordkeeping or reporting requirements</td>
<td>Yes.</td>
</tr>
<tr>
<td>§ 63.11</td>
<td>Control Device Requirements</td>
<td>No.</td>
</tr>
<tr>
<td>§ 63.12</td>
<td>State Authority and Delegation</td>
<td>Yes.</td>
</tr>
<tr>
<td>§ 63.13–63.16</td>
<td>Addresses, Incorporation by Reference, Availability of Information, Performance Track Provisions.</td>
<td>Yes.</td>
</tr>
<tr>
<td>§ 63.1(a)(5),(a)(7)–(a)(9), (b)(2), (c)(3), (d), (e)(3)-(4), (f), (g), (h), (i), (j),(k),(l),(m),(n),(o),(p),(q), (r), (s),(t),(u),(v), (w), (x), (y), (z)</td>
<td>Reserved</td>
<td></td>
</tr>
</tbody>
</table>


**Table 11 to Subpart DDDDD of Part 63—Alternative Emission Limits for New or Reconstructed Boilers and Process Heaters That Commenced Construction or Reconstruction After June 4, 2010, and Before May 20, 2011**

<table>
<thead>
<tr>
<th>If your boiler or process heater is in this subcategory . . .</th>
<th>For the following pollutants . . .</th>
<th>The emissions must not exceed the following emission limits, except during periods of startup and shutdown . . .</th>
<th>Using this specified sampling volume or test run duration . . .</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Units in all subcategories designed to burn solid fuel.</td>
<td>a. HCl</td>
<td>0.022 lb per MMBtu of heat input.</td>
<td>For M26A, collect a minimum of 1 dscm per run; for M26 collect a minimum of 120 liters per run. For M29, collect a minimum of 4 dscm per run; for M30A or M30B, collect a minimum sample as specified in the method; for ASTM D6784 collect a minimum of 4 dscm.</td>
</tr>
<tr>
<td>2. Units in all subcategories designed to burn solid fuel that combust at least 10 percent biomass/bio-based solids on an annual heat input basis and less than 10 percent coal/solid fossil fuels on an annual heat input basis.</td>
<td>a. Mercury</td>
<td>8.0E–07 lb per MMBtu of heat input.</td>
<td></td>
</tr>
</tbody>
</table>

214
<table>
<thead>
<tr>
<th>If your boiler or process heater is in this subcategory . . .</th>
<th>For the following pollutants . . .</th>
<th>The emissions must not exceed the following emission limits, except during periods of start-up and shutdown . . .</th>
<th>Using this specified sampling volume or test run duration . . .</th>
</tr>
</thead>
<tbody>
<tr>
<td>3. Units in all subcategories designed to burn solid fuel that combust at least 10 percent coal/solid fossil fuels on an annual heat input basis and less than 10 percent biomass/bio-based solids on an annual heat input basis.</td>
<td>a. Mercury .................... 2.0E–06 lb per MMBtu of heat input.</td>
<td>For M29, collect a minimum of 4 dscm per run; for M30A or M30B, collect a minimum sample as specified in the method; for ASTM D6784, collect a minimum of 4 dscm.</td>
<td></td>
</tr>
<tr>
<td>4. Units design to burn coal/solid fossil fuel.</td>
<td>a. Filterable PM (or TSM).</td>
<td>1.1E–03 lb per MMBtu of heat input; or (2.3E–05 lb per MMBtu of heat input).</td>
<td>Collect a minimum of 3 dscm per run.</td>
</tr>
<tr>
<td>5. Pulverized coal boilers designed to burn coal/solid fossil fuel.</td>
<td>a. Carbon monoxide (CO) (or CEMS).</td>
<td>130 ppm by volume on a dry basis corrected to 3 percent oxygen, 3-run average; or 320 ppm by volume on a dry basis corrected to 3 percent oxygen.</td>
<td>1 hr minimum sampling time.</td>
</tr>
<tr>
<td>6. Stokers designed to burn coal/solid fossil fuel.</td>
<td>a. CO (or CEMS) ......... 130 ppm by volume on a dry basis corrected to 3 percent oxygen, 3-run average; or 340 ppm by volume on a dry basis corrected to 3 percent oxygen.</td>
<td>1 hr minimum sampling time.</td>
<td></td>
</tr>
<tr>
<td>7. Fluidized bed units designed to burn coal/solid fossil fuel.</td>
<td>a. CO (or CEMS) ......... 130 ppm by volume on a dry basis corrected to 3 percent oxygen, 3-run average; or 390 ppm by volume on a dry basis corrected to 3 percent oxygen.</td>
<td>1 hr minimum sampling time.</td>
<td></td>
</tr>
<tr>
<td>8. Fluidized bed units with an integrated heat exchanger designed to burn coal/solid fossil fuel.</td>
<td>a. CO (or CEMS) ......... 140 ppm by volume on a dry basis corrected to 3 percent oxygen, 3-run average; or 150 ppm by volume on a dry basis corrected to 3 percent oxygen.</td>
<td>1 hr minimum sampling time.</td>
<td></td>
</tr>
<tr>
<td>9. Stokers/sloped grate/others designed to burn wet biomass fuel.</td>
<td>a. CO (or CEMS) ......... 620 ppm by volume on a dry basis corrected to 3 percent oxygen, 3-run average; or 390 ppm by volume on a dry basis corrected to 3 percent oxygen.</td>
<td>1 hr minimum sampling time.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>b. Filterable PM (or TSM).</td>
<td>3.0E–02 lb per MMBtu of heat input; or (2.6E–05 lb per MMBtu of heat input).</td>
<td>Collect a minimum of 2 dscm per run.</td>
</tr>
<tr>
<td>10. Stokers/sloped grate/others designed to burn kiln-dried biomass fuel.</td>
<td>a. CO ......................... 560 ppm by volume on a dry basis corrected to 3 percent oxygen, 3-run average.</td>
<td>1 hr minimum sampling time.</td>
<td></td>
</tr>
</tbody>
</table>
If your boiler or process heater is in this subcategory . . . | For the following pollutants . . . | The emissions must not exceed the following emission limits, except during periods of startup and shutdown . . . | Using this specified sampling volume or test run duration . . .
---|---|---|---
11. Fluidized bed units designed to burn biomass/bio-based solids. | b. Filterable PM (or TSM). | 3.0E–02 lb per MMBtu of heat input; or 4.0E–03 lb per MMBtu of heat input. | Collect a minimum of 2 dscm per run. |
| a. CO (or CEMS) | 230 ppm by volume on a dry basis corrected to 3 percent oxygen, 3-run average; or 310 ppm by volume on a dry basis corrected to 3 percent oxygen; 30-day rolling average. | 1 hr minimum sampling time. |
12. Suspension burners designed to burn biomass/bio-based solids. | b. Filterable PM (or TSM). | 9.8E–03 lb per MMBtu of heat input; or (8.3E–03 lb per MMBtu of heat input). | Collect a minimum of 3 dscm per run. |
| a. CO (or CEMS) | 2,400 ppm by volume on a dry basis corrected to 3 percent oxygen, 3-run average; or (2,000 ppm by volume on a dry basis corrected to 3 percent oxygen; 10-day rolling average). | 1 hr minimum sampling time. |
13. Dutch Ovens/Pile burners designed to burn biomass/bio-based solids. | b. Filterable PM (or TSM). | 3.0E–02 lb per MMBtu of heat input; or 6.6E–02 lb per MMBtu of heat input. | Collect a minimum of 2 dscm per run. |
| a. CO (or CEMS) | 1,010 ppm by volume on a dry basis corrected to 3 percent oxygen, 3-run average; or (520 ppm by volume on a dry basis corrected to 3 percent oxygen; 10-day rolling average). | 1 hr minimum sampling time. |
14. Fuel cell units designed to burn biomass/bio-based solids. | b. Filterable PM (or TSM). | 8.0E–03 lb per MMBtu of heat input; or 3.9E–03 lb per MMBtu of heat input. | Collect a minimum of 3 dscm per run. |
| a. CO | 910 ppm by volume on a dry basis corrected to 3 percent oxygen, 3-run average. | 1 hr minimum sampling time. |
15. Hybrid suspension grate boiler designed to burn biomass/bio-based solids. | b. Filterable PM (or TSM). | 2.6E–02 lb per MMBtu of heat input; or 4.4E–04 lb per MMBtu of heat input. | Collect a minimum of 3 dscm per run. |
| a. CO (or CEMS) | 1,100 ppm by volume on a dry basis corrected to 3 percent oxygen, 3-run average; or (900 ppm by volume on a dry basis corrected to 3 percent oxygen; 30-day rolling average). | 1 hr minimum sampling time. |
16. Units designed to burn liquid fuel. | a. HCl | 4.4E–04 lb per MMBtu of heat input. | For M26A: Collect a minimum of 2 dscm per run; for M26, collect a minimum of 240 liters per run. |
If your boiler or process heater is in this subcategory . . . & For the following pollutants . . . & The emissions must not exceed the following emission limits, except during periods of startup and shutdown . . . & Using this specified sampling volume or test run duration . . .

| 17. Units designed to burn heavy liquid fuel. | b. Mercury | 4.8E–07 lb per MMBtu of heat input. | For M29, collect a minimum of 4 dscm per run; for M30A or M30B, collect a minimum sample as specified in the method; for ASTM D6784b collect a minimum of 4 dscm. |
| | a. CO | 130 ppm by volume on a dry basis corrected to 3 percent oxygen, 3-run average. | 1 hr minimum sampling time. |
| | b. Filterable PM (or TSM). | 1.3E–02 lb per MMBtu of heat input; or (7.5E–05 lb per MMBtu of heat input). | Collect a minimum of 3 dscm per run. |
| 18. Units designed to burn light liquid fuel. | a. CO | 130 ppm by volume on a dry basis corrected to 3 percent oxygen, 3-run average. | 1 hr minimum sampling time. |
| | b. Filterable PM (or TSM). | 2.0E–03 lb per MMBtu of heat input; or (2.9E–05 lb per MMBtu of heat input). | Collect a minimum of 3 dscm per run. |
| 19. Units designed to burn liquid fuel that are non-continental units. | a. CO | 130 ppm by volume on a dry basis corrected to 3 percent oxygen, 3-run average based on stack test. | 1 hr minimum sampling time. |
| | b. Filterable PM (or TSM). | 2.3E–02 lb per MMBtu of heat input; or (8.6E–04 lb per MMBtu of heat input). | Collect a minimum of 4 dscm per run. |
| 20. Units designed to burn gas 2 (other) gases. | a. CO | 130 ppm by volume on a dry basis corrected to 3 percent oxygen, 3-run average. | 1 hr minimum sampling time. |
| | b. HCl | 1.7E–03 lb per MMBtu of heat input. | For M26A, Collect a minimum of 2 dscm per run; for M26, collect a minimum of 240 liters per run. |
| | c. Mercury | 7.9E–06 lb per MMBtu of heat input. | For M29, collect a minimum of 3 dscm per run; for M30A or M30B, collect a minimum sample as specified in the method; for ASTM D6784b collect a minimum of 3 dscm. |
| | d. Filterable PM (or TSM). | 6.7E–03 lb per MMBtu of heat input; or (2.1E–04 lb per MMBtu of heat input). | Collect a minimum of 3 dscm per run. |

*If you are conducting stack tests to demonstrate compliance and your performance tests for this pollutant for at least 2 consecutive years show that your emissions are at or below this limit, you can skip testing according to §63.7515 if all of the other provision of §63.7515 are met. For all other pollutants that do not contain a footnote "a", your performance tests for this pollutant for at least 2 consecutive years must show that your emissions are at or below 75 percent of this limit in order to qualify for skip testing.

*Incorporated by reference, see §63.14.

*An owner or operator may request an alternative test method under §63.7 of this chapter, in order that compliance with the carbon monoxide emissions limit be determined using carbon dioxide as a diluent correction in place of oxygen at 3%. EPA Method 19 F-factors and EPA Method 19 equations must be used to generate the appropriate CO₂ correction percentage for the fuel type burned in the unit, and must also take into account that the 3% oxygen correction is to be done on a dry basis. The alternative test method request must account for any CO₂ being added to, or removed from, the emissions gas stream as a result of limestone injection, scrubber media, etc.

[(80 FR 72831, Nov. 20, 2015)]
### Table 12 to Subpart DDDDD of Part 63—Alternative Emission Limits for New or Reconstructed Boilers and Process Heaters That Commenced Construction or Reconstruction After May 20, 2011, and Before December 23, 2011

<table>
<thead>
<tr>
<th>Subcategory</th>
<th>Pollutant</th>
<th>Emission Limit</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Units in all subcategories designed to burn solid fuel</td>
<td>a. HCl</td>
<td>0.022 lb per MBtu of heat input</td>
</tr>
<tr>
<td></td>
<td>b. Mercury</td>
<td>3.5E–06 lb per MBtu of heat input</td>
</tr>
<tr>
<td>2. Units designed to burn coal/solid fuel</td>
<td>a. Filterable PM (or TSM)</td>
<td>1.1E–03 lb per MBtu of heat input; or (2.3E–05 lb per MBtu of heat input)</td>
</tr>
<tr>
<td></td>
<td>b. Carbon monoxide (CO) (or CEMS)</td>
<td>130 ppm by volume on a dry basis corrected to 3 percent oxygen, 3-run average; or (520 ppm by volume on a dry basis corrected to 3 percent oxygen, 30-day rolling average)</td>
</tr>
<tr>
<td>3. Pulverized coal boilers designed to burn coal/solid fuel</td>
<td>a. CO (or CEMS)</td>
<td>130 ppm by volume on a dry basis corrected to 3 percent oxygen, 3-run average; or (340 ppm by volume on a dry basis corrected to 3 percent oxygen, 30-day rolling average)</td>
</tr>
<tr>
<td>4. Stokers designed to burn coal/solid fuel</td>
<td>a. CO (or CEMS)</td>
<td>130 ppm by volume on a dry basis corrected to 3 percent oxygen, 3-run average; or (230 ppm by volume on a dry basis corrected to 3 percent oxygen, 10-day rolling average)</td>
</tr>
<tr>
<td>5. Fluidized bed units designed to burn coal/solid fuel</td>
<td>a. CO (or CEMS)</td>
<td>130 ppm by volume on a dry basis corrected to 3 percent oxygen, 3-run average; or (210 ppm by volume on a dry basis corrected to 3 percent oxygen, 30-day rolling average)</td>
</tr>
<tr>
<td>6. Fluidized bed units with an integrated heat exchanger designed to burn coal/solid fuel</td>
<td>a. CO (or CEMS)</td>
<td>140 ppm by volume on a dry basis corrected to 3 percent oxygen, 3-run average; or (150 ppm by volume on a dry basis corrected to 3 percent oxygen, 30-day rolling average)</td>
</tr>
<tr>
<td>7. Stokers/sloped grate/others designed to burn wet biomass fuel</td>
<td>a. CO (or CEMS)</td>
<td>620 ppm by volume on a dry basis corrected to 3 percent oxygen, 3-run average; or (390 ppm by volume on a dry basis corrected to 3 percent oxygen, 10-day rolling average)</td>
</tr>
<tr>
<td></td>
<td>b. Filterable PM (or TSM)</td>
<td>3.0E–02 lb per MBtu of heat input; or (6.3E–05 lb per MBtu of heat input)</td>
</tr>
<tr>
<td>8. Stokers/sloped grate/others designed to burn kiln-dried biomass fuel</td>
<td>a. CO (or CEMS)</td>
<td>460 ppm by volume on a dry basis corrected to 3 percent oxygen, 3-run average; or (310 ppm by volume on a dry basis corrected to 3 percent oxygen, 10-day rolling average)</td>
</tr>
<tr>
<td></td>
<td>b. Filterable PM (or TSM)</td>
<td>3.0E–02 lb per MBtu of heat input; or (4.0E–03 lb per MBtu of heat input)</td>
</tr>
<tr>
<td>9. Fluidized bed units designed to burn biomass/bio-based solids</td>
<td>a. CO (or CEMS)</td>
<td>260 ppm by volume on a dry basis corrected to 3 percent oxygen, 3-run average; or (310 ppm by volume on a dry basis corrected to 3 percent oxygen, 30-day rolling average)</td>
</tr>
<tr>
<td></td>
<td>b. Filterable PM (or TSM)</td>
<td>9.8E–03 lb per MBtu of heat input; or (2.3E–05 lb per MBtu of heat input)</td>
</tr>
<tr>
<td>10. Suspension burners designed to burn biomass/bio-based solids</td>
<td>a. CO (or CEMS)</td>
<td>2,400 ppm by volume on a dry basis corrected to 3 percent oxygen, 3-run average; or (2,000 ppm by volume on a dry basis corrected to 3 percent oxygen, 10-day rolling average)</td>
</tr>
<tr>
<td></td>
<td>b. Filterable PM (or TSM)</td>
<td>3.0E–02 lb per MBtu of heat input; or (6.5E–03 lb per MBtu of heat input)</td>
</tr>
<tr>
<td>11. Dutch Ovens/Pile burners designed to burn biomass/bio-based solids</td>
<td>a. CO (or CEMS)</td>
<td>470 ppm by volume on a dry basis corrected to 3 percent oxygen, 3-run average; or (520 ppm by volume on a dry basis corrected to 3 percent oxygen, 10-day rolling average)</td>
</tr>
<tr>
<td></td>
<td>b. Filterable PM (or TSM)</td>
<td>3.2E–03 lb per MBtu of heat input; or (3.9E–05 lb per MBtu of heat input)</td>
</tr>
</tbody>
</table>
## Environmental Protection Agency

**Pt. 63, Subpt. DDDDD, Table 12**

If your boiler or process heater is in this subcategory . . .

<table>
<thead>
<tr>
<th>For the following pollutants . . .</th>
<th>The emissions must not exceed the following emission limits, except during periods of startup and shutdown . . .</th>
</tr>
</thead>
<tbody>
<tr>
<td>12. Fuel cell units designed to burn biomass/bio-based solids.</td>
<td>Using this specified sampling volume or test run duration . . .</td>
</tr>
<tr>
<td>a. CO ..........................</td>
<td>910 ppm by volume on a dry basis corrected to 3 percent oxygen, 3-run average.</td>
</tr>
<tr>
<td>b. Filterable PM (or TSM).</td>
<td>2.0E–02 lb per MMBtu of heat input; or (2.9E–05 lb per MMBtu of heat input).</td>
</tr>
<tr>
<td>13. Hybrid suspension grate boiler designed to burn biomass/bio-based solids.</td>
<td>1 hr minimum sampling time.</td>
</tr>
<tr>
<td>a. CO (or CEMS) ...</td>
<td>1,500 ppm by volume on a dry basis corrected to 3 percent oxygen, 3-run average.</td>
</tr>
<tr>
<td>b. Filterable PM (or TSM).</td>
<td>2.0E–02 lb per MMBtu of heat input; or (4.4E–04 lb per MMBtu of heat input). Collect a minimum of 3 dscm per run.</td>
</tr>
<tr>
<td>14. Units designed to burn liquid fuel.</td>
<td>For M26A: Collect a minimum of 2 dscm per run; for M26, collect a minimum of 240 liters per run.</td>
</tr>
<tr>
<td>a. CO (or CEMS) ...</td>
<td>1,500 ppm by volume on a dry basis corrected to 3 percent oxygen, 3-run average.</td>
</tr>
<tr>
<td>b. Filterable PM (or TSM).</td>
<td>2.0E–02 lb per MMBtu of heat input; or (2.9E–05 lb per MMBtu of heat input). Collect a minimum of 2 dscm per run.</td>
</tr>
<tr>
<td>15. Units designed to burn heavy liquid fuel.</td>
<td>1 hr minimum sampling time.</td>
</tr>
<tr>
<td>a. CO ..........................</td>
<td>130 ppm by volume on a dry basis corrected to 3 percent oxygen, 3-run average.</td>
</tr>
<tr>
<td>b. Filterable PM (or TSM).</td>
<td>1.3E–02 lb per MMBtu of heat input; or (7.5E–05 lb per MMBtu of heat input). Collect a minimum of 2 dscm per run.</td>
</tr>
<tr>
<td>16. Units designed to burn light liquid fuel.</td>
<td>1 hr minimum sampling time.</td>
</tr>
<tr>
<td>a. CO ..........................</td>
<td>130 ppm by volume on a dry basis corrected to 3 percent oxygen, 3-run average.</td>
</tr>
<tr>
<td>b. Filterable PM (or TSM).</td>
<td>1.3E–03 lb per MMBtu of heat input; or (2.9E–05 lb per MMBtu of heat input). Collect a minimum of 3 dscm per run.</td>
</tr>
<tr>
<td>17. Units designed to burn liquid fuel that are non-continental units.</td>
<td>1 hr minimum sampling time.</td>
</tr>
<tr>
<td>a. CO ..........................</td>
<td>130 ppm by volume on a dry basis corrected to 3 percent oxygen, 3-run average based on stack test.</td>
</tr>
<tr>
<td>b. Filterable PM (or TSM).</td>
<td>2.3E–02 lb per MMBtu of heat input; or (8.6E–04 lb per MMBtu of heat input). Collect a minimum of 4 dscm per run.</td>
</tr>
<tr>
<td>18. Units designed to burn gas 2 (other) gases.</td>
<td>1 hr minimum sampling time.</td>
</tr>
<tr>
<td>a. CO ..........................</td>
<td>130 ppm by volume on a dry basis corrected to 3 percent oxygen, 3-run average.</td>
</tr>
<tr>
<td>b. HCl ..........................</td>
<td>1.7E–03 lb per MMBtu of heat input; or (2.1E–04 lb per MMBtu of heat input). Collect a minimum of 3 dscm per run.</td>
</tr>
<tr>
<td>c. Mercury .....................</td>
<td>7.9E–06 lb per MMBtu of heat input; or (8.6E–04 lb per MMBtu of heat input). Collect a minimum of 4 dscm per run. For M26A, Collect a minimum of 2 dscm per run; for M26, collect a minimum of 240 liters per run. For M29, collect a minimum of 4 dscm per run; for M30A or M30B, collect a minimum sample as specified in the method; for ASTM D6784 collect a minimum of 4 dscm.</td>
</tr>
<tr>
<td>d. Filterable PM (or TSM).</td>
<td>6.7E–03 lb per MMBtu of heat input; or (2.1E–04 lb per MMBtu of heat input). Collect a minimum of 3 dscm per run.</td>
</tr>
</tbody>
</table>

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*If you are conducting stack tests to demonstrate compliance and your performance tests for this pollutant for at least 2 consecutive years show that your emissions are at or below this limit, you can skip testing according to § 63.7515 if all of the other provision of § 63.7515 are met. For all other pollutants that do not contain a footnote “a”, your performance tests for this pollutant for at least 2 consecutive years must show that your emissions are at or below 75 percent of this limit in order to qualify for skip testing.*

*An owner or operator may request an alternative test method under § 63.7 of this chapter, in order that compliance with the carbon monoxide emissions limit be determined using carbon dioxide as a diluent correction in place of oxygen at 3%. EPA Method 19 F-factors and EPA Method 19 equations must be used to generate the appropriate \( \text{CO}_2 \) correction percentage for the fuel type burned in the unit, and must also take into account that the 3% oxygen correction is to be done on a dry basis. The alternative test method request must account for any \( \text{CO}_2 \) being added to, or removed from, the emissions gas stream as a result of limestone injection, scrubber media, etc.*

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[80 FR 72834, Nov. 20, 2015]
### Table 13 to Subpart DDDDD of Part 63—Alternative Emission Limits for New or Reconstructed Boilers and Process Heaters That Commenced Construction or Reconstruction After December 23, 2011, and Before April 1, 2013

<table>
<thead>
<tr>
<th>If your boiler or process heater is in this subcategory . . .</th>
<th>For the following pollutants . . .</th>
<th>The emissions must not exceed the following emission limits, except during periods of startup and shutdown . . .</th>
<th>Using this specified sampling volume or test run duration . . .</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Units in all subcategories designed to burn solid fuel.</td>
<td>a. HCl . . . 0.022 lb per MMBtu of heat input.</td>
<td></td>
<td>For M26A, collect a minimum of 1 dscm per run; for M26 collect a minimum of 120 liters per run.</td>
</tr>
<tr>
<td>2. Pulverized coal boilers designed to burn coal/solid fossil fuel.</td>
<td>a. Carbon monoxide (CO), (or CEMS). 130 ppm by volume on a dry basis corrected to 3 percent oxygen, 3-run average; or (230 ppm by volume on a dry basis corrected to 3 percent oxygen; 30-day rolling average).</td>
<td>b. Filterable PM (or TSM) . . . 1.1E–03 lb per MMBtu of heat input; or (2.8E–05 lb per MMBtu of heat input).</td>
<td>1 hr minimum sampling time.</td>
</tr>
<tr>
<td>3. Stokers designed to burn coal/solid fossil fuel.</td>
<td>a. CO (or CEMS) . . . 130 ppm by volume on a dry basis corrected to 3 percent oxygen, 3-run average; or (340 ppm by volume on a dry basis corrected to 3 percent oxygen; 10-day rolling average).</td>
<td>b. Filterable PM (or TSM) . . . 2.8E–02 lb per MMBtu of heat input; or (2.3E–05 lb per MMBtu of heat input).</td>
<td>1 hr minimum sampling time.</td>
</tr>
<tr>
<td>4. Fluidized bed units designed to burn coal/solid fossil fuel.</td>
<td>a. CO (or CEMS) . . . 130 ppm by volume on a dry basis corrected to 3 percent oxygen, 3-run average; or (230 ppm by volume on a dry basis corrected to 3 percent oxygen; 30-day rolling average).</td>
<td>b. Filterable PM (or TSM) . . . 1.1E–03 lb per MMBtu of heat input; or (2.8E–05 lb per MMBtu of heat input).</td>
<td>1 hr minimum sampling time.</td>
</tr>
<tr>
<td>5. Fluidized bed units with an integrated heat exchanger designed to burn coal/solid fossil fuel.</td>
<td>a. CO (or CEMS) . . . 140 ppm by volume on a dry basis corrected to 3 percent oxygen, 3-run average; or (150 ppm by volume on a dry basis corrected to 3 percent oxygen; 30-day rolling average).</td>
<td>b. Filterable PM (or TSM) . . . 1.1E–03 lb per MMBtu of heat input; or (2.3E–05 lb per MMBtu of heat input).</td>
<td>1 hr minimum sampling time.</td>
</tr>
<tr>
<td>6. Stokers/sloped grate/others designed to burn wet biomass fuel.</td>
<td>a. CO (or CEMS) . . . 620 ppm by volume on a dry basis corrected to 3 percent oxygen, 3-run average; or (610 ppm by volume on a dry basis corrected to 3 percent oxygen; 10-day rolling average).</td>
<td>b. Filterable PM (or TSM) . . . 3.0E–02 lb per MMBtu of heat input; or (2.6E–05 lb per MMBtu of heat input).</td>
<td>1 hr minimum sampling time.</td>
</tr>
<tr>
<td>7. Stokers/sloped grate/others designed to burn kiln-dried biomass fuel.</td>
<td>a. CO . . . 460 ppm by volume on a dry basis corrected to 3 percent oxygen.</td>
<td></td>
<td>1 hr minimum sampling time.</td>
</tr>
<tr>
<td>Subcategory</td>
<td>Pollutants</td>
<td>Emission Limits</td>
<td>Sampling Time</td>
</tr>
<tr>
<td>-------------------------------------------------</td>
<td>------------</td>
<td>-------------------------------------------------------------------------------</td>
<td>---------------</td>
</tr>
<tr>
<td>Fluidized bed units designed to burn biomass/bio-based solids.</td>
<td>a. CO (or CEMS)</td>
<td>230 ppm by volume on a dry basis corrected to 3 percent oxygen, 3-run average; or (310 ppm by volume on a dry basis corrected to 3 percent oxygen, 30-day rolling average).</td>
<td>1 hr minimum sampling time.</td>
</tr>
<tr>
<td></td>
<td>b. Filterable PM (or TSM)</td>
<td>9.8E–03 lb per MMBtu of heat input; or (8.3E–05 lb per MMBtu of heat input).</td>
<td>Collect a minimum of 3 dscm per run.</td>
</tr>
<tr>
<td>Suspension burners designed to burn biomass/bio-based solids.</td>
<td>a. CO (or CEMS)</td>
<td>2,400 ppm by volume on a dry basis corrected to 3 percent oxygen, 3-run average; or (2,000 ppm by volume on a dry basis corrected to 3 percent oxygen, 10-day rolling average).</td>
<td>1 hr minimum sampling time.</td>
</tr>
<tr>
<td></td>
<td>b. Filterable PM (or TSM)</td>
<td>5.1E–02 lb per MMBtu of heat input; or (6.5E–03 lb per MMBtu of heat input).</td>
<td>Collect a minimum of 2 dscm per run.</td>
</tr>
<tr>
<td>Dutch Ovens/Pile burners designed to burn biomass/bio-based solids.</td>
<td>a. CO (or CEMS)</td>
<td>810 ppm by volume on a dry basis corrected to 3 percent oxygen.</td>
<td>1 hr minimum sampling time.</td>
</tr>
<tr>
<td></td>
<td>b. Filterable PM (or TSM)</td>
<td>3.6E–02 lb per MMBtu of heat input; or (3.9E–05 lb per MMBtu of heat input).</td>
<td>Collect a minimum of 2 dscm per run.</td>
</tr>
<tr>
<td>Fuel cell units designed to burn biomass/bio-based solids.</td>
<td>a. CO</td>
<td>910 ppm by volume on a dry basis corrected to 3 percent oxygen.</td>
<td>1 hr minimum sampling time.</td>
</tr>
<tr>
<td></td>
<td>b. Filterable PM (or TSM)</td>
<td>2.6E–02 lb per MMBtu of heat input; or (4.4E–04 lb per MMBtu of heat input).</td>
<td>Collect a minimum of 3 dscm per run.</td>
</tr>
<tr>
<td>Hybrid suspension grate boiler designed to burn biomass/bio-based solids.</td>
<td>a. CO (or CEMS)</td>
<td>1,500 ppm by volume on a dry basis corrected to 3 percent oxygen, 3-run average; or (900 ppm by volume on a dry basis corrected to 3 percent oxygen, 10-day rolling average).</td>
<td>1 hr minimum sampling time.</td>
</tr>
<tr>
<td></td>
<td>b. Filterable PM (or TSM)</td>
<td>2.6E–02 lb per MMBtu of heat input; or (4.4E–04 lb per MMBtu of heat input).</td>
<td>Collect a minimum of 2 dscm per run.</td>
</tr>
<tr>
<td>Units designed to burn liquid fuel.</td>
<td>a. HCl</td>
<td>1.2E–04 lb per MMBtu of heat input.</td>
<td>For M26A: Collect a minimum of 4 dscm per run; for M26, collect a minimum of 240 liters per run.</td>
</tr>
<tr>
<td></td>
<td>b. Mercury</td>
<td>4.8E–07 lb per MMBtu of heat input.</td>
<td>For M29, collect a minimum of 4 dscm per run; for M30A or M30B, collect a minimum sample as specified in the method; for ASTM D6784 collect a minimum of 240 liters per run.</td>
</tr>
<tr>
<td>Units designed to burn heavy liquid fuel.</td>
<td>a. CO (or CEMS)</td>
<td>130 ppm by volume on a dry basis corrected to 3 percent oxygen, 3-run average; or (18 ppm by volume on a dry basis corrected to 3 percent oxygen, 10-day rolling average).</td>
<td>1 hr minimum sampling time.</td>
</tr>
</tbody>
</table>
If your boiler or process heater is in this subcategory...  

For the following pollutants...  

The emissions must not exceed the following emission limits, except during periods of startup and shutdown...  

Using this specified sampling volume or test run duration...  

<table>
<thead>
<tr>
<th>No.</th>
<th>Description</th>
<th>Emission Limits</th>
<th>Sampling Time</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>15.</td>
<td>Units designed to burn light liquid fuel.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
  a. CO (or CEMS) | 130 ppm by volume on a dry basis corrected to 3 percent oxygen, or 60 ppm by volume on a dry basis corrected to 3 percent oxygen, 1-day block average | 1 hr minimum sampling time |  
  b. Filterable PM (or TSM) | 130 ppm by volume on a dry basis corrected to 3 percent oxygen, 3-run average based on stack test | Collect a minimum of 3 dscm per run |  
| 16. | Units designed to burn liquid fuel that are non-continental units. |  
  a. CO | 130 ppm by volume on a dry basis corrected to 3 percent oxygen, 3-hour rolling average | 1 hr minimum sampling time |  
  b. Filterable PM (or TSM) | 2.3E–02 lb per MMBtu of heat input, or 8.6E–04 lb per MMBtu of heat input | Collect a minimum of 2 dscm per run |  
| 17. | Units designed to burn gas 2 (other) gases. |  
  a. CO | 130 ppm by volume on a dry basis corrected to 3 percent oxygen | 1 hr minimum sampling time |  
  b. HCl | 1.7E–03 lb per MMBtu of heat input | For M26A, collect a minimum of 2 dscm per run; for M26, collect a minimum of 240 liters per run |  
  c. Mercury | 7.9E–06 lb per MMBtu of heat input | For M29, collect a minimum of 3 dscm per run; for M30A or M30B, collect a minimum sample as specified in the method; for ASTM D6784 collect a minimum of 3 dscm |  
  d. Filterable PM (or TSM) | 6.7E–03 lb per MMBtu of heat input, or 2.1E–04 lb per MMBtu of heat input | Collect a minimum of 3 dscm per run |  

*If you are conducting stack tests to demonstrate compliance and your performance tests for this pollutant for at least 2 consecutive years show that your emissions are at or below this limit and you are not required to conduct testing for CEMS or CPMS monitor certification, you can skip testing according to § 63.7515 if all of the other provisions of § 63.7515 are met. For all other pollutants that do not contain a footnote "a", your performance tests for this pollutant for at least 2 consecutive years must show that your emissions are at or below 75 percent of this limit in order to qualify for skip testing.

*b Incorporated by reference, see § 63.14.

** An owner or operator may request an alternative test method under § 63.7 of this chapter in order that compliance with the carbon monoxide emissions limit be determined using carbon dioxide as a diluent correction in place of oxygen at 3%. EPA Method 19 F-factors and EPA Method 19 equations must be used to generate the appropriate CO₂ correction percentage for the fuel type burned in the unit, and must also take into account that the 3% oxygen correction is to be done on a dry basis. The alternative test method request must account for any CO₂ being added to, or removed from, the emissions gas stream as a result of limestone injection, scrubber media, etc.


Subpart EEEE—National Emission Standards for Hazardous Air Pollutants for Iron and Steel Foundries

Source: 69 FR 21923, Apr. 22, 2004, unless otherwise noted.

What this Subpart Covers

§ 63.7680 What is the purpose of this subpart?

This subpart establishes national emission standards for hazardous air pollutants (NESHAP) for iron and steel foundries. This subpart also establishes requirements to demonstrate initial and continuous compliance with the emissions limitations, work practice standards, and operation and maintenance requirements in this subpart.
§ 63.7681 Am I subject to this subpart?
You are subject to this subpart if you own or operate an iron and steel foundry that is (or is part of) a major source of hazardous air pollutant (HAP) emissions. Your iron and steel foundry is a major source of HAP for purposes of this subpart if it emits or has the potential to emit any single HAP at a rate of 10 tons or more per year or any combination of HAP at a rate of 25 tons or more per year or if it is located at a facility that emits or has the potential to emit any single HAP at a rate of 10 tons or more per year or any combination of HAP at a rate of 25 tons or more per year as defined in § 63.2.


§ 63.7682 What parts of my foundry does this subpart cover?
(a) The affected source is each new or existing iron and steel foundry.
(b) This subpart covers emissions from metal melting furnaces, scrap preheaters, pouring areas, pouring stations, automated conveyor and pallet cooling lines, automated shakeout lines, and mold and core making lines. This subpart also covers fugitive emissions from foundry operations.
(c) An affected source is existing if you commenced construction or reconstruction of the affected source before December 23, 2002.
(d) An affected source is new if you commenced construction or reconstruction of the affected source on or after December 23, 2002. An affected source is reconstructed if it meets the definition of “reconstruction” in § 63.2.

§ 63.7683 When do I have to comply with this subpart?
(a) Except as specified in paragraph (b) of this section, if you have an existing affected source, you must comply with each emissions limitation, work practice standard, and operation and maintenance requirement in this subpart that applies to you no later than April 23, 2007. Major source status for existing affected sources must be determined no later than April 23, 2007.
(b) If you have an existing affected source, you must comply with the work practice standards in § 63.7700(b) or (c), as applicable, no later than April 22, 2005.
(c) If you have a new affected source for which the initial startup date is on or before April 22, 2004, you must comply with each emissions limitation, work practice standard, and operation and maintenance requirement in this subpart that applies to you by April 22, 2004.
(d) If you have a new affected source for which the initial startup date is after April 22, 2004, you must comply with each emissions limitation, work practice standard, and operation and maintenance requirement in this subpart that applies to you upon initial startup.
(e) If your iron and steel foundry is an area source that becomes a major source of HAP, you must meet the requirements of § 63.6(c)(5).
(f) You must meet the notification and schedule requirements in § 63.7750. Note that several of these notifications must be submitted before the compliance date for your affected source.

EMISSIONS LIMITATIONS

§ 63.7690 What emissions limitations must I meet?
(a) You must meet the emissions limits or standards in paragraphs (a)(1) through (11) of this section that apply to you. When alternative emissions limitations are provided for a given emissions source, you are not restricted in the selection of which applicable alternative emissions limitation is used to demonstrate compliance.
(1) For each electric arc metal melting furnace, electric induction metal melting furnace, or scrap preheater at an existing iron and steel foundry, you must not discharge emissions through a conveyance to the atmosphere that exceed either the limit for particulate matter (PM) in paragraph (a)(1)(i) of this section or, alternatively the limit for total metal HAP in paragraph (a)(1)(ii) of this section:
(i) 0.005 grains of PM per dry standard cubic foot (gr/dscf), or
(ii) 0.0004 gr/dscf of total metal HAP.
(2) For each cupola metal melting furnace at an existing iron and steel
foundry, you must not discharge emissions through a conveyance to the atmosphere that exceed either the limit for PM in paragraph (a)(2)(i) or (ii) of this section or, alternatively the limit for total metal HAP in paragraph (a)(2)(iii) or (iv) of this section:

(i) 0.006 gr/dscf of PM; or
(ii) 0.10 pound of PM per ton (lb/ton) of metal charged, or
(iii) 0.0005 gr/dscf of total metal HAP; or
(iv) 0.008 pound of total metal HAP per ton (lb/ton) of metal charged.

(3) For each cupola metal melting furnace or electric arc metal melting furnace at a new iron and steel foundry, you must not discharge emissions through a conveyance to the atmosphere that exceed either the limit for PM in paragraph (a)(3)(i) of this section or, alternatively the limit for total metal HAP in paragraph (a)(3)(ii) of this section:

(i) 0.002 gr/dscf of PM, or
(ii) 0.0002 gr/dscf of total metal HAP.

(4) For each electric induction metal melting furnace or scrap preheater at a new or existing iron and steel foundry, you must not discharge emissions through a conveyance to the atmosphere that exceed either the limit for PM in paragraph (a)(4)(i) of this section or, alternatively the limit for total metal HAP in paragraph (a)(4)(ii) of this section:

(i) 0.001 gr/dscf of PM, or
(ii) 0.00008 gr/dscf of total metal HAP.

(5) For each pouring station at an existing iron and steel foundry, you must not discharge emissions through a conveyance to the atmosphere that exceed either the limit for PM in paragraph (a)(5)(i) of this section or, alternatively the limit for total metal HAP in paragraph (a)(5)(ii) of this section:

(i) 0.010 gr/dscf of PM, or
(ii) 0.00008 gr/dscf of total metal HAP.

(6) For each pouring area or pouring station at a new iron and steel foundry, you must not discharge emissions through a conveyance to the atmosphere that exceed either the limit for PM in paragraph (a)(6)(i) of this section or, alternatively the limit for total metal HAP in paragraph (a)(6)(ii) of this section:

(i) 0.002 gr/dscf of PM, or
(ii) 0.00002 gr/dscf of total metal HAP.

(7) For each building or structure housing any iron and steel foundry emissions source at the iron and steel foundry, you must not discharge any fugitive emissions to the atmosphere from foundry operations that exhibit opacity greater than 20 percent (6-minute average), except for one 6-minute average per hour that does not exceed 27 percent opacity.

(8) For each cupola metal melting furnace at a new or existing iron and steel foundry, you must not discharge emissions of volatile organic hazardous air pollutants (VOHAP) through a conveyance to the atmosphere that exceed 20 parts per million by volume (ppmv) corrected to 10 percent oxygen.

(9) As an alternative to the work practice standard in §63.7700(e) for a scrap preheater at an existing iron and steel foundry or in §63.7700(f) for a scrap preheater at a new iron and steel foundry, you must not discharge emissions of VOHAP through a conveyance to the atmosphere that exceed 20 ppmv.

(10) For one or more automated conveyor and pallet cooling lines that use a sand mold system or automated shakeout lines that use a sand mold system at a new iron and steel foundry, you must not discharge emissions of VOHAP through a conveyance to the atmosphere that exceed a flow-weighted average of 20 ppmv.

(11) For each triethylamine (TEA) cold box mold or core making line at a new or existing iron and steel foundry, you must meet either the emissions limit in paragraph (a)(11)(i) of this section or, alternatively the emissions standard in paragraph (a)(11)(ii) of this section:

(i) You must not discharge emissions of TEA through a conveyance to the atmosphere that exceed 1 ppmv, as determined according to the performance test procedures in §63.7732(g); or
(ii) You must reduce emissions of TEA from each TEA cold box mold or core making line by at least 99 percent, as determined according to the performance test procedures in §63.7732(g).

(b) You must meet each operating limit in paragraphs (b)(1) through (5) of this section that applies to you.

(1) You must install, operate, and maintain a capture and collection system for all emissions sources subject to
an emissions limit for VOHAP or TEA in paragraphs (a)(8) through (11) of this section.

(i) Each capture and collection system must meet accepted engineering standards, such as those published by the American Conference of Governmental Industrial Hygienists.

(ii) You must operate each capture system at or above the lowest value or settings established as operating limits in your operation and maintenance plan.

(2) You must operate each wet scrubber applied to emissions from a metal melting furnace, scrap preheater, pouring area, or pouring station subject to an emissions limit for PM or total metal HAP in paragraphs (a)(1) through (6) of this section such that the 3-hour average pressure drop and scrubber water flow rate does not fall below the minimum levels established during the initial or subsequent performance test.

(3) You must operate each combustion device applied to emissions from a cupola metal melting furnace subject to the emissions limit for VOHAP in paragraph (a)(8) of this section, such that the 15-minute average combustion zone temperature does not fall below the minimum level established during the initial or subsequent performance test.

(4) You must operate each combustion device applied to emissions from a scrap preheater subject to the emissions limit for VOHAP in paragraph (a)(9) of this section or from a TEA cold box mold or core making line subject to the emissions limit for TEA in paragraph (a)(11) of this section, such that the 3-hour average combustion zone temperature does not fall below the minimum level established during the initial or subsequent performance test.

(5) You must operate each wet acid scrubber applied to emissions from a TEA cold box mold or core making line subject to the emissions limit for TEA in paragraph (a)(11) of this section such that:

(i) The 3-hour average scrubbing liquid flow rate does not fall below the minimum level established during the initial or subsequent performance test; and

(ii) The 3-hour average pH of the scrubber blowdown, as measured by a continuous parameter monitoring system (CPMS), does not exceed 4.5 or the pH of the scrubber blowdown, as measured once every 8 hours during process operations, does not exceed 4.5.

(c) If you use a control device other than a baghouse, wet scrubber, wet acid scrubber, or combustion device, you must prepare and submit a monitoring plan containing the information listed in paragraphs (c)(1) through (5) of this section. The monitoring plan is subject to approval by the Administrator.

(1) A description of the device;

(2) Test results collected in accordance with §63.7732 verifying the performance of the device for reducing emissions of PM, total metal HAP, VOHAP, or TEA to the levels required by this subpart;

(3) A copy of the operation and maintenance plan required by §63.7710(b);

(4) A list of appropriate operating parameters that will be monitored to maintain continuous compliance with the applicable emissions limitation(s); and

(5) Operating parameter limits based on monitoring data collected during the performance test.

uses only metal ingots, pig iron, slitter, or other materials that do not include post-consumer automotive body scrap, post-consumer engine blocks, post-consumer oil filters, oily turnings, lead components, mercury switches, plastics, or free organic liquids. For the purpose of this paragraph (b), “free organic liquids” is defined as material that fails the paint filter test by EPA Method 9095A, “Paint Filter Liquids Test” (Revision 1, December 1996), as published in EPA Publication SW–846 “Test Methods for Evaluating Solid Waste, Physical/Chemical Methods” (incorporated by reference—see §63.14). Any post-consumer engine blocks, post-consumer oil filters, or oily turnings that are processed and/or cleaned to the extent practicable such that the materials do not include lead components, mercury switches, chlorinated plastics, or free organic liquids can be included in this certification.

(c) You must prepare and operate at all times according to a written plan for the selection and inspection of iron and steel scrap to minimize, to the extent practicable, the amount of organics and HAP metals in the charge materials used by the iron and steel foundry. This scrap selection and inspection plan is subject to approval by the Administrator. You must keep a copy of the plan onsite and readily available to all plant personnel with materials acquisition or inspection duties. You must provide a copy of the material specifications to each of your scrap vendors. Each plan must include the information specified in paragraphs (c)(1) through (3) of this section.

(1) A materials acquisition program to limit organic contaminants according to the requirements in paragraph (c)(1)(i) or (ii) of this section, as applicable.

(i) For scrap charged to a scrap preheater, electric arc metal melting furnace, or electric induction metal melting furnace, specifications for scrap materials to be depleted (to the extent practicable) of the presence of used oil filters, chlorinated plastic parts, organic liquids, and a program to ensure the scrap materials are drained of free liquids; or

(ii) For scrap charged to a cupola metal melting furnace, specifications for scrap materials to be depleted (to the extent practicable) of the presence of chlorinated plastic, and a program to ensure the scrap materials are drained of free liquids.

(2) A materials acquisition program specifying that the scrap supplier remove accessible mercury switches from the trunks and hoods of any automotive bodies contained in the scrap and remove accessible lead components such as batteries and wheel weights. You must either obtain and maintain onsite a copy of the procedures used by the scrap supplier for either removing accessible mercury switches or for purchasing automobile bodies that have had mercury switches removed, as applicable, or document your attempts to obtain a copy of these procedures from the scrap suppliers servicing your area.

(3) Procedures for visual inspection of a representative portion, but not less than 10 percent, of all incoming scrap shipments to ensure the materials meet the specifications.

(i) The inspection procedures must identify the location(s) where inspections are to be performed for each type of shipment. Inspections may be performed at the scrap supplier’s facility. The selected location(s) must provide a reasonable vantage point, considering worker safety, for visual inspection.

(ii) The inspection procedures must include recordkeeping requirements that document each visual inspection and the results.

(iii) The inspection procedures must include provisions for rejecting or returning entire or partial scrap shipments that do not meet specifications and limiting purchases from vendors whose shipments fail to meet specifications for more than three inspections in one calendar year.

(iv) If the inspections are performed at the scrap supplier’s facility, the inspection procedures must include an explanation of how the periodic inspections ensure that not less than 10 percent of scrap purchased from each supplier is subject to inspection.

(d) For each furan warm box mold or core making line in a new or existing iron and steel foundry, you must use a binder chemical formulation that does
not contain methanol as a specific ingredient of the catalyst formulation as determined by the Material Safety Data Sheet. This requirement does not apply to the resin portion of the binder system.

(e) For each scrap preheater at an existing iron and steel foundry, you must meet either the requirement in paragraph (e)(1) or (2) of this section. As an alternative to the requirement in paragraph (e)(1) or (2) of this section, you must meet the VOHAP emissions limit in §63.7690(a)(9).

(1) You must operate and maintain a gas-fired preheater where the flame directly contacts the scrap charged; or

(2) You must charge only material that is subject to and in compliance with the scrap certification requirement in paragraph (b) of this section.

(f) For each scrap preheater at a new iron and steel foundry, you must charge only material that is subject to and in compliance with the scrap certification requirement in paragraph (b) of this section. As an alternative to this requirement, you must meet the VOHAP emissions limit in §63.7690(a)(9).


OPERATION AND MAINTENANCE REQUIREMENTS

§63.7710 What are my operation and maintenance requirements?

(a) As required by §63.6(e)(1)(i), you must always operate and maintain your iron and steel foundry, including air pollution control and monitoring equipment, in a manner consistent with good air pollution control practices for minimizing emissions at least to the levels required by this subpart.

(b) You must prepare and operate at all times according to a written operation and maintenance plan for each capture and collection system and control device for an emissions source subject to a PM, metal HAP, TEA, or VOHAP emissions limit in §63.7690(a). Your operation and maintenance plan is subject to approval by the Administrator. Each plan must contain the elements described in paragraphs (b)(1) through (6) of this section.

(1) Monthly 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 must include observations of the physical appearance of the equipment (e.g., presence of holes in the ductwork or hoods, flow constrictions caused by dents or accumulated dust in the ductwork, and fan erosion). The operation and maintenance plan must also include requirements to repair the defect or deficiency as soon as practicable.

(2) Operating limits for each capture system for an emissions source subject to an emissions limit or standard for VOHAP or TEA in §63.7690(a)(8) through (11). You must establish the operating according to the requirements in paragraphs (b)(2)(i) through (iii) of this section.

(i) Select operating limit parameters appropriate for the capture system design that are representative and reliable indicators of the performance of the capture system. At a minimum, you must use appropriate operating limit parameters that indicate the level of the ventilation draft and damper position settings for the capture system when operating to collect emissions, including revised settings for seasonal variations. Appropriate operating limit parameters for ventilation draft include, but are not limited to: volumetric flow rate through each separately ducted hood, total volumetric flow rate at the inlet to the control device to which the capture system is vented, fan motor amperage, or static pressure. Any parameter for damper position setting may be used that indicates the duct damper position related to the fully open setting.

(ii) For each operating limit parameter selected in paragraph (b)(2)(i) of this section, designate the value or setting for the parameter at which the capture system operates during the process operation. If your operation allows for more than one process to be operating simultaneously, designate the value or setting for the parameter
§63.7710  40 CFR Ch. I (7–1–16 Edition)

at which the capture system operates during each possible configuration that you may operate (i.e., the operating limits with one furnace melting, two melting, as applicable to your plant).

(iii) Include documentation in your plan to support your selection of the operating limits established for your capture system. This documentation must include a description of the capture system design, a description of the capture system operating during production, a description of each selected operating limit parameter, a rationale for why you chose the parameter, a description of the method used to monitor the parameter according to the requirements of §63.7740(a), and the data used to set the value or setting for the parameter for each of your process configurations.

(3) Preventative maintenance plan for each control device, including a preventative maintenance schedule that is consistent with the manufacturer’s instructions for routine and long-term maintenance.

(4) A site-specific monitoring plan for each bag leak detection system. For each bag leak detection system that operates on the triboelectric effect, the monitoring plan must be consistent with the recommendations contained in the U.S. Environmental Protection Agency guidance document “Fabric Filter Bag Leak Detection Guidance” (EPA–454R–98–015). This baghouse monitoring plan is subject to approval by the Administrator. 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 must address all of the items identified in paragraphs (b)(4)(i) through (v) of this section.

(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.

(v) How the bag leak detection system output will be recorded and stored.

(5) Corrective action plan for each baghouse. The plan must include the requirement that, in the event a bag leak detection system alarm is triggered, you must initiate corrective action to determine the cause of the alarm within 1 hour of the alarm, initiate corrective action to correct the cause of the problem within 24 hours of the alarm, and complete the corrective action as soon as practicable. Corrective actions taken may include, but are not limited to:

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

(ii) Sealing off defective bags or filter media.

(iii) Replacing defective bags or filter media or otherwise repairing the control device.

(iv) Sealing off a defective baghouse compartment.

(v) Cleaning the bag leak detection system probe or otherwise repairing the bag leak detection system.

(vi) Making process changes.

(vii) Shutting down the process producing the PM emissions.

(6) Procedures for providing an ignition source to mold vents of sand mold systems in each pouring area and pouring station unless you determine the mold vent gases either are not ignitable, ignite automatically, or cannot be ignited due to accessibility or safety issues. You must document and maintain records of this determination. The determination of ignitability, accessibility, and safety may encompass multiple casting patterns provided the castings utilize similar sand-to-metal ratios, binder formulations, and coating materials. The determination of ignitability must be based on observations of the mold vents within 5 minutes of pouring, and the flame must be present for at least 15 seconds for the mold vent to be considered ignited. For the purpose of this determination:

(i) Mold vents that ignite more than 75 percent of the time without the presence of an auxiliary ignition source are considered to ignite automatically; and

(ii) Mold vents that do not ignite automatically and cannot be ignited in...
the presence of an auxiliary ignition source more than 25 percent of the time are considered to be not ignitable.


GENERAL COMPLIANCE REQUIREMENTS

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

(a) You must be in compliance with the emissions limitations, work practice standards, and operation and maintenance requirements in this subpart at all times, except during periods of startup, shutdown, or malfunction.

(b) During the period between the compliance date specified for your iron and steel foundry in §63.7683 and the date when applicable operating limits have been established during the initial performance test, you must maintain a log detailing the operation and maintenance of the process and emissions control equipment.

(c) You must develop a written startup, shutdown, and malfunction plan according to the provisions in §63.6(e)(3). The startup, shutdown, and malfunction plan also must specify what constitutes a shutdown of a cupola and how to determine that operating conditions are normal following startup of a cupola.


INITIAL COMPLIANCE REQUIREMENTS

§ 63.7730 By what date must I conduct performance tests or other initial compliance demonstrations?

(a) As required by §63.7(a)(2), you must conduct a performance test no later than 180 calendar days after the compliance date that is specified in §63.7683 for your iron and steel foundry to demonstrate initial compliance with each emissions limitation in §63.7690 that applies to you.

(b) For each work practice standard in §63.7700 and each operation and maintenance requirement in §63.7710 that applies to you where initial compliance is not demonstrated using a performance test, you must demonstrate initial compliance no later than 30 calendar days after the compliance date that is specified for your iron and steel foundry in §63.7683.

(c) If you commenced construction or reconstruction between December 23, 2002 and April 22, 2004, you must demonstrate initial compliance with either the proposed emissions limit or the promulgated emissions limit no later than October 19, 2004 or no later than 180 calendar days after startup of the source, whichever is later, according to §63.7(a)(2)(ix).

(d) If you commenced construction or reconstruction between December 23, 2002 and April 22, 2004, and you chose to comply with the proposed emissions limit when demonstrating initial compliance, you must conduct a second performance test to demonstrate compliance with the promulgated emissions limit by October 19, 2007 or after startup of the source, whichever is later, according to §63.7(a)(2)(ix).

§ 63.7731 When must I conduct subsequent performance tests?

(a) You must conduct subsequent performance tests to demonstrate compliance with all applicable PM or total metal HAP, VOHAP, and TEA emissions limitations in §63.7690 for your iron and steel foundry no less frequently than every 5 years and each time you elect to change an operating limit or to comply with a different alternative emissions limit, if applicable. The requirement to conduct performance tests every 5 years does not apply to an emissions source for which a continuous emissions monitoring system (CEMS) is used to demonstrate continuous compliance.

(b) You must conduct subsequent performance tests to demonstrate compliance with the opacity limit in §63.7690(a)(7) for your iron and steel foundry no less frequently than once every 6 months.


§ 63.7732 What test methods and other procedures must I use to demonstrate initial compliance with the emissions limitations?

(a) You must conduct each performance test that applies to your iron and steel foundry based on your selected compliance alternative, if applicable,
according to the requirements in §63.7(e)(1) and the conditions specified in paragraphs (b) through (i) of this section.

(b) To determine compliance with the applicable emissions limit for PM in §63.7690(a)(1) through (6) for a metal melting furnace, scrap preheater, pouring station, or pouring area, follow the test methods and procedures in paragraphs (b)(1) through (6) of this section.

(1) Determine the concentration of PM according to the test methods in 40 CFR part 60, appendix A that are specified in paragraphs (b)(1)(i) through (v) of this section.

(i) Method 1 or 1A 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 to determine the volumetric flow rate of the stack gas.

(iii) Method 3, 3A, or 3B to determine the dry molecular weight of the stack gas.

(iv) Method 4 to determine the moisture content of the stack gas.

(v) Method 5, 5B, 5D, 5F, or 5I, as applicable, to determine the PM concentration. The PM concentration is determined using only the front-half (probe rinse and filter) of the PM catch.

(2) Collect a minimum sample volume of 60 dscf of gas during each PM sampling run. A minimum of three valid test runs are needed to comprise a performance test.

(3) For cupola metal melting furnaces, sample only during times when the cupola is on blast.

(4) For electric arc and electric induction metal melting furnaces, sample only during normal production conditions, which may include, but are not limited to the following cycles: Charging, melting, alloying, refining, slagging, and tapping.

(5) For scrap preheaters, sample only during normal production conditions, which may include, but are not limited to the following cycles: Charging, heating, and discharging.

(6) Determine the total mass of metal charged to the furnace or scrap preheater. For a cupola metal melting furnace at an existing iron and steel foundry that is subject to the PM emissions limit in §63.7690(a)(ii), calculate the PM emissions rate in pounds of PM per ton (lb/ton) of metal charged using Equation 1 of this section:

\[
\text{EF}_{\text{PM}} = C_{\text{PM}} \times \left( \frac{Q}{M_{\text{charge}}} \right) \times \left( \frac{t_{\text{test}}}{7,000} \right) \quad \text{(Eq.1)}
\]

Where:

\( \text{EF}_{\text{PM}} \) = Mass emissions rate of PM, pounds of PM per ton (lb/ton) of metal charged;

\( C_{\text{PM}} \) = Concentration of PM measured during performance test run, gr/dscf;

\( Q \) = Volumetric flow rate of exhaust gas, dry standard cubic feet per minute (dscfm);

\( M_{\text{charge}} \) = Mass of metal charged during performance test run, tons;

\( t_{\text{test}} \) = Duration of performance test run, minutes; and

7,000 = Unit conversion factor, grains per pound (gr/lb).

(c) To determine compliance with the applicable emissions limit for total metal HAP in §63.7690(a)(1) through (6) for a metal melting furnace, scrap preheater, pouring station, or pouring area, follow the test methods and procedures in paragraphs (c)(1) through (6) of this section.

(1) Determine the concentration of total metal HAP according to the test methods in 40 CFR part 60, appendix A that are specified in paragraphs (c)(1)(i) through (v) of this section.

(i) Method 1 or 1A 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.
Environmental Protection Agency § 63.7732

(ii) Method 2, 2A, 2C, 2D, 2F, or 2G to determine the volumetric flow rate of the stack gas.

(iii) Method 3, 3A, or 3B to determine the dry molecular weight of the stack gas.

(iv) Method 4 to determine the moisture content of the stack gas.

(v) Method 29 to determine the total metal HAP concentration.

(2) A minimum of three valid test runs are needed to comprise a performance test.

(3) For cupola metal melting furnaces, sample only during times when the cupola is on blast.

(4) For electric arc and electric induction metal melting furnaces, sample only during normal production conditions, which may include, but are not limited to the following cycles: Charging, melting, alloying, refining, slagging, and tapping.

(5) For scrap preheaters, sample only during normal production conditions, which may include, but are not limited to the following cycles: Charging, heating, and discharging.

(6) Determine the total mass of metal charged to the furnace or scrap preheater during each performance test run and calculate the total metal HAP emissions rate (pounds of total metal HAP per ton (lb/ton) of metal charged) using Equation 2 of this section:

\[
EF_{TMHAP} = C_{TMHAP} \times \left( \frac{Q}{M_{charge}} \right) \times \left( \frac{t_{test}}{7,000} \right)
\]

Where:

\( EF_{TMHAP} \) = Emissions rate of total metal HAP, pounds of total metal HAP per ton (lb/ton) of metal charged;

\( C_{TMHAP} \) = Concentration of total metal HAP measured during performance test run, gr/dscf;

\( Q \) = Volumetric flow rate of exhaust gas, dscfm;

\( M_{charge} \) = Mass of metal charged during performance test run, tons;

\( t_{test} \) = Duration of performance test run, minutes; and

7,000 = Unit conversion factor, gr/lb.

(d) To determine compliance with the opacity limit in §63.7690(a)(7) for fugitive emissions from buildings or structures housing any iron and steel foundry emissions source at the iron and steel foundry, follow the procedures in paragraphs (d)(1) and (2) of this section.

(1) Using a certified observer, conduct each opacity test according to the requirements in EPA Method 9 (40 CFR part 60, appendix A) and §63.6(h)(5). The certified observer may identify a limited number of openings or vents that appear to have the highest opacities and perform opacity observations on the identified openings or vents in lieu of performing observations for each opening or vent from the building or structure. Alternatively, a single opacity observation for the entire building or structure may be performed, if the fugitive release points afford such an observation.

(2) During testing intervals when PM performance tests, if applicable, are being conducted, conduct the opacity test such the opacity observations are recorded during the PM performance tests.

(e) To determine compliance with the applicable VOHAP emissions limit in §63.7690(a)(8) for a cupola metal melting furnace or in §63.7690(a)(9) for a scrap preheater, follow the test methods and procedures in paragraphs (e)(1) through (4) of this section.

(1) Determine the VOHAP concentration for each test run according to the test methods in 40 CFR part 60, appendix A that are specified in paragraphs (b)(1)(i) through (v) of this section.

(1) Method 1 or 1A 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 to determine the volumetric flow rate of the stack gas.

231
(iii) Method 3, 3A, or 3B to determine the dry molecular weight of the stack gas.
(iv) Method 4 to determine the moisture content of the stack gas.
(v) Method 18 to determine the VOHAP concentration. Alternatively, you may use Method 25 to determine the concentration of total gaseous non-methane organics (TGNMO) or Method 25A to determine the concentration of total organic compounds (TOC), using hexane as the calibration gas.

(2) Determine the average VOHAP, TGNMO, or TOC concentration using a minimum of three valid test runs. Each test run must include a minimum of 60 continuous operating minutes.
(3) For a cupola metal melting furnace, correct the measured concentration of VOHAP, TGNMO, or TOC for oxygen content in the gas stream using the following equation:

\[
C_{\text{VOHAP, 10\%O}_2} = C_{\text{VOHAP}} \left(\frac{10.9\%}{20.9\% - \%O_2}\right) \quad (\text{Eq. 3})
\]

Where:
- \(C_{\text{VOHAP}}\) = Concentration of VOHAP in ppmv as measured by Method 18 in 40 CFR part 60, appendix A or the concentration of TGNMO or TOC in ppmv as hexane as measured by Method 25 or 25A in 40 CFR part 60, appendix A; and
- \(%O_2\) = Oxygen concentration in gas stream, percent by volume (dry basis).

(4) For a cupola metal melting furnace, measure the combustion zone temperature of the combustion device with the CPMS required in §63.7740(d) during each sampling run in 15-minute intervals. Determine and record the 15-minute average of the three runs.

(f) Follow the applicable procedures in paragraphs (f)(1) through (3) of this section to determine compliance with the VOHAP emissions limit in §63.7690(a)(10) for automated pallet cooling lines or automated shakeout lines.

(i) Using the VOC CEMS required in §63.7740(g), measure and record the concentration of total hydrocarbons (as the surrogate for VOHAP) using a volatile organic compound (VOC) CEMS.

(ii) Reduce the monitoring data to hourly averages as specified in §63.8(g)(2).

(iii) Compute and record the 3-hour average of the monitoring data.

(2) As an alternative to the procedures in paragraph (f)(1) of this section, you may demonstrate compliance with the VOHAP emissions limit in §63.7690(a)(10) by establishing a site-specific TOC emissions limit that is correlated to the VOHAP emissions limit according to the procedures in paragraph (f)(2)(i) through (ix) of this section.

(i) Determine the VOHAP concentration for each test run according to the test methods in 40 CFR part 60, appendix A that are specified in paragraph (f)(2)(ii) through (vi) of this section.
(ii) Method 1 or 1A 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.

(iii) Method 2, 2A, 2C, 2D, 2F, or 2G to determine the volumetric flow rate of the stack gas.
(iv) Method 3, 3A, or 3B to determine the dry molecular weight of the stack gas.
(v) Method 4 to determine the moisture content of the stack gas.

(vi) Method 18 to determine the VOHAP concentration. Alternatively, you may use Method 25 to determine...
the concentration of TGNMO using hexane as the calibration gas.

(vii) Using the CEMS required in §63.7740(g), measure and record the concentration of total hydrocarbons (as hexane) during each of the Method 18 (or Method 25) sampling runs. You must measure emissions 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.

(viii) Calculate the average VOHAP (or TGNMO) concentration for the source test as the arithmetic average of the concentrations measured for the individual test runs, and determine the average concentration of total hydrocarbon (as hexane) as measured by the CEMS during all test runs.

(ix) Calculate the site-specific VOC emissions limit using Equation 4 of this section:

\[
\text{VOC}_{\text{limit}} = 20 \times \frac{C_{\text{VOHAP, avg}}}{C_{\text{CEM}}} \quad (\text{Eq. 4})
\]

Where:
\(C_{\text{VOHAP, avg}}\) = Average concentration of VOHAP for the source test in ppmv as measured by Method 18 in 40 CFR part 60, appendix A or the average concentration of TGNMO for the source test in ppmv as hexane as measured by Method 25 in 40 CFR part 60, appendix A; and
\(C_{\text{CEM}}\) = Average concentration of total hydrocarbons in ppmv as hexane as measured using the CEMS during the source test.

(3) For two or more exhaust streams from one or more automated conveyor and pallet cooling lines or automated shakeout lines, compute the flow-weighted average concentration of VOHAP emissions for each combination of exhaust streams using Equation 5 of this section:

\[
C_w = \frac{\sum_{i=1}^{n} C_i Q_i}{\sum_{i=1}^{n} Q_i} \quad (\text{Eq. 5})
\]

Where:
\(C_w\) = Flow-weighted concentration of VOHAP or VOC, ppmv (as hexane);
\(C_i\) = Concentration of VOHAP or VOC from exhaust stream “i”, ppmv (as hexane);
\(n\) = Number of exhaust streams sampled; and
\(Q_i\) = Volumetric flow rate of effluent gas from exhaust stream “i”, dscfm.

(g) To determine compliance with the emissions limit or standard in §63.7690(a)(11) for a TEA cold box mold or core making line, follow the test methods in 40 CFR part 60, appendix A, specified in paragraphs (g)(1) through (4) of this section.

(i) Method 1 or 1A to select sampling port locations and the number of traverse points in each stack or duct. If you elect to meet the 99 percent reduction standard, sampling sites must be located both at the inlet to the control device and at the outlet of the control device prior to any releases to the atmosphere. If you elect to meet the concentration limit, the sampling site 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 to determine the volumetric flow rate of the stack gas.

(iii) Method 3, 3A, or 3B to determine the dry molecular weight of the stack gas.

(iv) Method 4 to determine the moisture content of the stack gas.

(v) Method 18 to determine the TEA concentration. Alternatively, you may use NIOSH Method 2010 (incorporated by reference—see §63.14) to determine the TEA concentration provided the performance requirements outlined in section 13.1 of EPA Method 18 are satisfied. The sampling option and time must be sufficiently long such that either the TEA concentration in the field sample is at least 5 times the limit of detection for the analytical method or the test results calculated using the laboratory’s reported analytical detection limit for the specific field samples are less than 1⁄5 of the applicable emissions limit. When using Method 18, the adsorbent tube approach, as described in section 8.2.4 of Method 18, may be required to achieve the necessary analytical detection limits. The sampling
time must be at least 1 hour in all cases.

(2) If you use a wet acid scrubber, conduct the test as soon as practicable after adding fresh acid solution and the system has reached normal operating conditions.

(3) If you use a wet acid scrubber that is subject to the operating limit in §63.7690(b)(5)(ii) for pH level, determine the pH of the scrubber blowdown using the procedures in paragraph (g)(3)(i) or (ii) of this section.

(i) Measure the pH of the scrubber blowdown with the CPMS required in §63.7740(f)(2) during each TEA sampling run in intervals of no more than 15 minutes. Determine and record the 3-hour average; or

(ii) Measure and record the pH level using the probe and meter required in §63.7740(f)(2) once each sampling run. Determine and record the average pH level for the three runs.

(4) If you are subject to the 99 percent reduction standard, calculate the mass emissions reduction using Equation 6 of this section:

\[
\% \text{ reduction} = \frac{E_i - E_o}{E_i} \times 100\% \quad \text{(Eq. 6)}
\]

Where:

- \(E_i\) = Mass emissions rate of TEA at control device inlet, kilograms per hour (kg/hr);
- \(E_o\) = Mass emissions rate of TEA at control device outlet, kg/hr.

(h) To determine compliance with the PM or total metal HAP emissions limits in §63.7690(a)(1) through (6) when one or more regulated emissions sources are combined with either another regulated emissions source subject to a different emissions limit or other non-regulated emissions sources, you may demonstrate compliance using one of the procedures in paragraphs (h)(1) through (3) of this section.

(1) Meet the most stringent applicable emissions limit for the regulated emissions sources included in the combined emissions stream for the combined emissions stream.

(2) Use the procedures in paragraphs (h)(2)(i) through (iii) of this section.

(i) Determine the volumetric flow rate of the individual regulated streams for which emissions limits apply.

(ii) Calculate the flow-weighted average emissions limit, considering only the regulated streams, using Equation 5 of this section, except \(C_w\) is the flow-weighted average emissions limit for PM or total metal HAP in the exhaust stream, gr/dscf; and \(C_i\) is the concentration of PM or total metal HAP in exhaust stream "i", gr/dscf.

(iii) Meet the calculated flow-weighted average emissions limit for the regulated emissions sources included in the combined emissions stream for the combined emissions stream.

(3) Use the procedures in paragraphs (h)(3)(i) through (iii) of this section.

(i) Determine the PM or total metal HAP concentration of each of the regulated streams prior to the combination with other exhaust streams or control device.

(ii) Measure the flow rate and PM or total metal HAP concentration of the combined exhaust stream both before and after the control device and calculate the mass removal efficiency of the control device using Equation 6 of this section, except \(E_i\) is the mass emissions rate of PM or total metal HAP at the control device inlet, lb/hr and \(E_o\) is the mass emissions rate of PM or total metal HAP at the control device outlet, lb/hr.

(iii) Meet the applicable emissions limit based on the calculated PM or total metal HAP concentration for the regulated emissions sources using Equation 7 of this section:

\[
C_{\text{released}} = C_i \times \left(1 - \frac{\% \text{ reduction}}{100}\right) \quad \text{(Eq. 7)}
\]
Environmental Protection Agency

§ 63.7733

What procedures must I use to establish operating limits?

(a) For each capture system subject to operating limits in §63.7690(b)(1)(ii), you must establish site-specific operating limits in your operation and maintenance plan according to the procedures in paragraphs (a)(1) through (3) of this section.

(1) Concurrent with applicable emissions and opacity tests, measure and record values for each of the operating limit parameters in your capture system operation and maintenance plan according to the monitoring requirements in §63.7740(a).

(2) For any dampers that are manually set and remain at the same position at all times the capture system is operating, the damper position must be visually checked and recorded at the beginning and end of each run.

(3) Review and record the monitoring data. Identify and explain any times the capture system operated outside the applicable operating limits.

(b) For each wet scrubber subject to the operating limits in §63.7690(b)(2) for pressure drop and scrubber water flow rate, you must establish site-specific operating limits according to the procedures specified in paragraphs (b)(1) and (2) of this section.

(1) Using the CPMS required in §63.7740(c), measure and record the pressure drop and scrubber water flow rate in intervals of no more than 15 minutes during each PM test run.

(2) Compute and record the average pressure drop and average scrubber water flow rate for each valid sampling run in which the applicable emissions limit is met.

(c) For each combustion device applied to emissions from a scrap preheater or TEA cold box mold or core making line subject to the operating limit in §63.7690(b)(4) for combustion zone temperature, you must establish a site-specific operating limit according to the procedures specified in paragraphs (c)(1) and (2) of this section.

(1) Using the CPMS required in §63.7740(e), measure and record the combustion zone temperature during each sampling run in intervals of no more than 15 minutes.

(2) Compute and record the average combustion zone temperature for each valid sampling run in which the applicable emissions limit is met.

(d) For each acid wet scrubber subject to the operating limit in §63.7690(b)(5), you must establish a site-specific operating limit for scrubbing liquid flow rate according to the procedures specified in paragraphs (d)(1) and (2) of this section.

(1) Using the CPMS required in §63.7740(f), measure and record the scrubbing liquid flow rate during each TEA sampling run in intervals of no more than 15 minutes.

(2) Compute and record the average scrubbing liquid flow rate for each valid sampling run in which the applicable emissions limit is met.

(e) You may change the operating limits for a capture system, wet scrubber, acid wet scrubber, or combustion device if you meet the requirements in paragraphs (e)(1) through (3) of this section.

(1) Submit a written notification to the Administrator of your request to conduct a new performance test to revise the operating limit.

(2) Conduct a performance test to demonstrate compliance with the applicable emissions limitation in §63.7690.

(3) Establish revised operating limits according to the applicable procedures in paragraphs (a) through (d) of this section.
(f) You may use a previous performance test (conducted since December 22, 2002) to establish an operating limit provided the test meets the requirements of this subpart.


§ 63.7734 How do I demonstrate initial compliance with the emissions limitations that apply to me?

(a) You have demonstrated initial compliance with the emissions limits in §63.7690(a) by meeting the applicable conditions in paragraphs (a)(1) through (11) of this section. When alternative emissions limitations are provided for a given emissions source, you are not restricted in the selection of which applicable alternative emissions limitation is used to demonstrate compliance.

(1) For each electric arc metal melting furnace, electric induction metal melting furnace, or scrap preheater at an existing iron and steel foundry,
   (i) The average PM concentration in the exhaust stream, determined according to the performance test procedures in §63.7732(b), did not exceed 0.005 gr/dscf; or
   (ii) The average total metal HAP concentration in the exhaust stream, determined according to the performance test procedures in §63.7732(c), did not exceed 0.0004 gr/dscf.

(2) For each cupola metal melting furnace at an existing iron and steel foundry,
   (i) The average PM concentration in the exhaust stream, determined according to the performance test procedures in §63.7732(b), did not exceed 0.006 gr/dscf; or
   (ii) The average total metal HAP concentration in the exhaust stream, determined according to the performance test procedures in §63.7732(c), did not exceed 0.0004 gr/dscf.

(3) For each cupola metal melting furnace or electric arc metal melting furnace at a new iron and steel foundry,
   (i) The average PM concentration in the exhaust stream, determined according to the performance test procedures in §63.7732(b), did not exceed 0.002 gr/dscf; or
   (ii) The average total metal HAP concentration in the exhaust stream, determined according to the performance test procedures in §63.7732(c), did not exceed 0.0002 gr/dscf.

(4) For each electric induction metal melting furnace or scrap preheater at a new iron and steel foundry,
   (i) The average PM concentration in the exhaust stream, determined according to the performance test procedures in §63.7732(b), did not exceed 0.001 gr/dscf; or
   (ii) The average total metal HAP concentration in the exhaust stream, determined according to the performance test procedures in §63.7732(c), did not exceed 0.00008 gr/dscf.

(5) For each pouring station at an existing iron and steel foundry,
   (i) The average PM concentration in the exhaust stream, measured according to the performance test procedures in §63.7732(b), did not exceed 0.010 gr/dscf; or
   (ii) The average total metal HAP concentration in the exhaust stream, determined according to the performance test procedures in §63.7732(c), did not exceed 0.0008 gr/dscf.

(6) For each pouring area or pouring station at a new iron and steel foundry,
   (i) The average PM concentration in the exhaust stream, measured according to the performance test procedures in §63.7732(b), did not exceed 0.002 gr/dscf; or
   (ii) The average total metal HAP concentration in the exhaust stream, determined according to the performance test procedures in §63.7732(c), did not exceed 0.0002 gr/dscf.

(7) For each building or structure housing any iron and steel foundry emissions source at the iron and steel foundry, the opacity of fugitive emissions from foundry operations discharged to the atmosphere, determined...
Environmental Protection Agency

§ 63.7735

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

(a) For each iron and steel foundry subject to the certification requirement in §63.7700(b), you have demonstrated initial compliance if you have certificed in your notification of compliance status that: “At all times, your foundry will purchase and use only metal ingots, pig iron, slitter, or other materials that do not include post-consumer automotive body scrap, post-consumer engine blocks, post-consumer oil filters, oily turnings, lead components, mercury switches, plastics, or free organic liquids.”
§ 63.7736 How do I demonstrate initial compliance with the operation and maintenance requirements that apply to me?

(a) For each capture system subject to an operating limit in §63.7690(b), you have demonstrated initial compliance if you have met the conditions in paragraphs (a)(1) and (2) of this section.

(1) You have certified in your notification of compliance status that:

(i) You have submitted the capture system operation and maintenance plan to the Administrator for approval according to the requirements of §63.7710(b); and

(ii) You will inspect, operate, and maintain each capture system according to the procedures in the plan.

(2) You have certified in your performance test report that the system operated during the test at the operating limits established in your operation and maintenance plan.

(b) For each control device subject to an operating limit in §63.7690(b), you have demonstrated initial compliance if you have met the conditions in paragraphs (a)(1) and (2) of this section.

(1) You have submitted the control device operation and maintenance plan to the Administrator for approval according to the requirements of §63.7710(b); and

(2) You will inspect, operate, and maintain each control device according to the procedures in the plan.

(c) For each bag leak detection system, you have demonstrated initial compliance if you have met the conditions in paragraphs (a)(1) and (2) of this section.

(1) You have submitted the bag leak detection system monitoring information to the Administrator within the written O&M plan for approval according to the requirements of §63.7710(b);
(2) You will inspect, operate, and maintain each bag leak detection system according to the procedures in the plan; and

(3) You will follow the corrective action procedures for bag leak detection system alarms according to the requirements in the plan.

(d) For each pouring area and pouring station in a new or existing foundry, you have demonstrated initial compliance if you have certified in your notification of compliance status report that:

(1) You have submitted the mold vent ignition plan to the Administrator for approval according to the requirements in §63.7710(b); and

(2) You will follow the procedures for igniting mold vent gases according to the requirements in the plan.


CONTINUOUS COMPLIANCE REQUIREMENTS

§ 63.7740 What are my monitoring requirements?

(a) For each capture system subject to an operating limit in §63.7690(b)(1), you must install, operate, and maintain a CPMS according to the requirements in §63.7741(a) and the requirements in paragraphs (a)(1) and (2) of this section.

(1) If you use a flow measurement device to monitor the operating limit parameter, you must at all times monitor the hourly average rate (e.g., the hourly average actual volumetric flow rate through each separately ducted hood or the average hourly total volumetric flow rate at the inlet to the control device).

(2) Dampers that are manually set and remain in the same position are exempt from the requirement to install and operate a CPMS. If dampers are not manually set and remain in the same position, you must make a visual check at least once every 24 hours to verify that each damper for the capture system is in the same position as during the initial performance test.

(b) For each negative pressure baghouse or positive pressure baghouse equipped with a stack that is applied to meet any PM or total metal HAP emissions limitation in this subpart, you must at all times monitor the relative change in PM loadings using a bag leak detection system according to the requirements in §63.7741(b).

(c) For each baghouse, regardless of type, that is applied to meet any PM or total metal HAP emissions limitation in this subpart, you must conduct inspections at their specified frequencies according to the requirements specified in paragraphs (c)(1) through (8) of this section.

(1) Monitor the pressure drop across each baghouse cell each day to ensure pressure drop is within the normal operating range identified in the manual.

(2) Confirm that dust is being removed from hoppers through weekly visual inspections or other means of ensuring the proper functioning of removal mechanisms.

(3) Check the compressed air supply for pulse-jet baghouses each day.

(4) Monitor cleaning cycles to ensure proper operation using an appropriate methodology.

(5) Check bag cleaning mechanisms for proper functioning through monthly visual inspections or equivalent means.

(6) Make monthly visual checks of bag tension on reverse air and shaker-type baghouses to ensure that bags are not kinked (kneed or bent) or lying on their sides. You do not have to make this check for shaker-type baghouses using self-tensioning (spring-loaded) devices.

(7) Confirm the physical integrity of the baghouse through quarterly visual inspections of the baghouse interior for air leaks.

(8) Inspect fans for wear, material buildup, and corrosion through quarterly visual inspections, vibration detectors, or equivalent means.

(d) For each wet scrubber subject to the operating limits in §63.7690(b)(2), you must at all times monitor the 3-hour average pressure drop and scrubber water flow rate using CPMS according to the requirements in §63.7741(c).

(e) For each combustion device subject to the operating limit in §63.7690(b)(3), you must at all times monitor the 15-minute average combustion zone temperature using a CPMS.
§ 63.7741 What are the installation, operation, and maintenance requirements for my monitors?

(a) For each capture system subject to an operating limit in §63.7690(b)(1), you must install, operate, and maintain each CPMS according to the requirements in paragraphs (a)(1) through (3) of this section.

(1) If you use a flow measurement device to monitor an operating limit parameter for a capture system, you must meet the requirements in paragraphs (a)(1)(i) through (iv) of this section.

(i) Locate the flow sensor and other necessary equipment such as straightening vanes in a position that provides a representative flow and that reduces swirling flow or abnormal velocity distributions due to upstream and downstream disturbances.

(ii) Use a flow sensor with a minimum measurement sensitivity of 2 percent of the flow rate.

(iii) Conduct a flow sensor calibration check at least semiannually.

(iv) At least monthly, visually inspect all components, including all electrical and mechanical connections, for proper functioning.

(b) For one or more automated conveyor and pallet cooling lines and automated shakeout lines at a new iron and steel foundry subject to the VOHAP emissions limit in §63.7690(a)(10), you must install, operate, and maintain a bag leak detection system according to the requirements in paragraphs (b)(1) through (7) of this section.

(1) If you use a pressure measurement device to monitor the operating limit parameter for a capture system, you must meet the requirements in paragraphs (a)(2)(i) through (vi) of this section.

(i) Locate the pressure sensor(s) in or as close as possible to a position that provides a representative measurement of the pressure and that minimizes or eliminates pulsating pressure, vibration, and internal and external corrosion.

(ii) Use a gauge with a minimum measurement sensitivity of 0.5 inch of water or a transducer with a minimum measurement sensitivity of 1 percent of the pressure range.

(iii) Check the pressure tap for pluggage daily. If a "non-clogging" pressure tap is used, check for pluggage monthly.

(iv) Using a manometer or equivalent device such as a magnahelic or other pressure indicating transmitter, check gauge and transducer calibration quarterly.

(v) Conduct calibration checks any time the sensor exceeds the manufacturer’s specified maximum operating pressure range, or install a new pressure sensor.

(vi) At least monthly, visually inspect all components, including all electrical and mechanical connections, for proper functioning.

(3) Record the results of each inspection, calibration, and validation check.

(b) For each negative pressure baghouse or positive pressure baghouse equipped with a stack that is applied to meet any PM or total metal HAP emissions limitation in this subpart, you must install, operate, and maintain a bag leak detection system according to the requirements in paragraphs (b)(1) through (7) of this section.

(1) The system must be certified by the manufacturer to be capable of detecting emissions of particulate matter.
Environmental Protection Agency § 63.7741

at concentrations of 10 milligrams per actual cubic meter (0.0044 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 system must be equipped with an alarm that will sound when an increase in relative particulate loadings is detected over the alarm set point established in the operation and maintenance plan, and the alarm must be located such that it can be heard by the appropriate plant personnel.

(4) The initial adjustment of the system must, at 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).

(5) Following the initial adjustment, do not adjust the sensitivity or range, averaging period, alarm set point, or alarm delay time without approval from the Administrator. Except, once per quarter, you may adjust the sensitivity of the bag leak detection system to account for seasonable effects including temperature and humidity according to the procedures in the operation and maintenance plan required by §63.7710(b).

(6) For negative pressure, induced air baghouses, and positive pressure baghouses that are discharged to the atmosphere through a stack, the bag leak detector sensor must be installed downstream of the baghouse and upstream of any wet scrubber.

(7) Where multiple detectors are required, the system’s instrumentation and alarm may be shared among detectors.

(c) For each wet scrubber subject to the operating limits in §63.7690(b)(2), you must install and maintain CPMS to measure and record the pressure drop and scrubber water flow rate according to the requirements in paragraphs (c)(1) and (2) of this section.

(1) For each CPMS for pressure drop you must:

(i) Locate the pressure sensor in or as close as possible to a position that provides a representative measurement of the pressure drop and that minimizes or eliminates pulsating pressure, vibration, and internal and external corrosion.

(ii) Use a gauge with a minimum measurement sensitivity of 0.5 inch of water or a transducer with a minimum measurement sensitivity of 1 percent of the pressure range.

(iii) Check the pressure tap for pluggage daily. If a “non-clogging” pressure tap is used, check for pluggage monthly.

(iv) Using a manometer or equivalent device such as a manuahelic or other pressure indicating transmitter, check gauge and transducer calibration quarterly.

(v) Conduct calibration checks any time the sensor exceeds the manufacturer’s specified maximum operating pressure range, or install a new pressure sensor.

(vi) At least monthly, visually inspect all components, including all electrical and mechanical connections, for proper functioning.

(2) For each CPMS for scrubber liquid flow rate, you must:

(i) Locate the flow sensor and other necessary equipment in a position that provides a representative flow and that reduces swirling flow or abnormal velocity distributions due to upstream and downstream disturbances.

(ii) Use a flow sensor with a minimum measurement sensitivity of 2 percent of the flow rate.

(iii) Conduct a flow sensor calibration check at least semiannually according to the manufacturer's instructions.

(iv) At least monthly, visually inspect all components, including all electrical and mechanical connections, for proper functioning.

(d) For each combustion device subject to the operating limit in §63.7690(b)(3) or (4), you must install and maintain a CPMS to measure and record the combustion zone temperature according to the requirements in paragraphs (d)(1) through (8) of this section.
(1) Locate the temperature sensor in a position that provides a representative temperature.

(2) For a noncryogenic temperature range, use a temperature sensor with a minimum tolerance of 2.2 °C or 0.75 percent of the temperature value, whichever is larger.

(3) For a cryogenic temperature range, use a temperature sensor with a minimum tolerance of 2.2 °C or 2 percent of the temperature value, whichever is larger.

(4) Shield the temperature sensor system from electromagnetic interference and chemical contaminants.

(5) If you use a chart recorder, it must have a sensitivity in the minor division of at least 20 °F.

(6) Perform an electronic calibration at least semiannually according to the procedures in the manufacturer's owner's manual. Following the electronic calibration, conduct a temperature sensor validation check, in which a second or redundant temperature sensor placed nearby the process temperature sensor must yield a reading within 16.7 °C of the process temperature sensor's reading.

(7) Conduct calibration and validation checks any time the sensor exceeds the manufacturer's specified maximum operating temperature range, or install a new temperature sensor.

(8) At least monthly, visually inspect all components, including all electrical and mechanical connections, for proper functioning.

(e) For each wet acid scrubber subject to the operating limits in §63.7690(b)(5), you must:

(1) Install and maintain CPMS to measure and record the scrubbing liquid flow rate according to the requirements in paragraph (c)(2) of this section;

(2) Install and maintain CPMS to measure and record the pH of the scrubber blowdown according to the requirements in paragraph (e)(2)(i) through (iv) of this section.

(i) Locate the pH sensor in a position that provides a representative measurement of the pH and that minimizes or eliminates internal and external corrosion.

(ii) Use a gauge with a minimum measurement sensitivity of 0.1 pH or a transducer with a minimum measurement sensitivity of 5 percent of the pH range.

(iii) Check gauge calibration quarterly and transducer calibration monthly using a manual pH gauge.

(iv) At least monthly, visually inspect all components, including all electrical and mechanical connections, for proper functioning.

(3) As an alternative to the CPMS required in paragraph (e)(2) of this section, you may use a pH probe to extract a sample for analysis by a pH meter that meets the requirements in paragraphs (e)(3)(i) through (iii) of this section.

(i) The pH meter must have a range of at least 1 to 5 or more:

(ii) The pH meter must have an accuracy of ±0.1; and

(iii) The pH meter must have a resolution of at least 0.1 pH.

(f) You must operate each CPMS used to meet the requirements of this subpart according to the requirements specified in paragraphs (f)(1) through (3) of this section.

(1) Each CPMS must complete a minimum of one cycle of operation for each successive 15-minute period. You must have a minimum of three of the required four data points to constitute a valid hour of data.

(2) Each CPMS must have valid hourly data for 100 percent of every averaging period.

(3) Each CPMS must determine and record the hourly average of all recorded readings and the 3-hour average of all recorded readings.

(g) For each automated conveyor and pallet cooling line and automated shakeout line at a new iron and steel foundry subject to the VOHAP emissions limit in §63.7690(a)(10), you must install, operate, and maintain a CEMS to measure and record the concentration of VOHAP emissions according to the requirements in paragraphs (g)(1) through (3) of this section.

(1) You must install, operate, and maintain each CEMS according to Performance Specification 8 in 40 CFR part 60, appendix B.

(2) You must conduct a performance evaluation of each CEMS according to
the requirements of §63.8 and Performance Specification 8 in 40 CFR part 60, appendix B.

(3) You must operate each CEMS according to the requirements specified in paragraph (g)(3)(i) through (iv) of this section.

(i) 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.

(ii) You must reduce CEMS data as specified in §63.8(g)(2).

(iii) Each CEMS must determine and record the 3-hour average emissions using all the hourly averages collected for periods during which the CEMS is not out-of-control.

(iv) Record the results of each inspection, calibration, and validation check.


§ 63.7742 How do I monitor and collect data to demonstrate continuous compliance?

(a) Except for monitoring 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 (or collect data at all required intervals) any time a source of emissions is operating.

(b) 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 emissions or operating levels or to fulfill a minimum data availability requirement, if applicable. You must use all the data collected during all other periods in assessing compliance.

(c) A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring system to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions.

§ 63.7743 How do I demonstrate continuous compliance with the emissions limitations that apply to me?

(a) You must demonstrate continuous compliance by meeting the applicable conditions in paragraphs (a)(1) through (12) of this section. When alternative emissions limitations are provided for a given emissions source, you must comply with the alternative emissions limitation most recently selected as your compliance alternative.

(1) For each electric arc metal melting furnace, electric induction metal melting furnace, or scrap preheater at an existing iron and steel foundry,

(i) Maintaining the average PM concentration in the exhaust stream at or below 0.005 gr/dscf; or

(ii) Maintaining the average total metal HAP concentration in the exhaust stream at or below 0.0004 gr/dscf.

(2) For each cupola metal melting furnace at an existing iron and steel foundry,

(i) Maintaining the average PM concentration in the exhaust stream at or below 0.006 gr/dscf; or

(ii) Maintaining the average total metal HAP concentration in the exhaust stream at or below 0.0005 gr/dscf; or

(iii) Maintaining the average PM mass emissions rate at or below 0.10 pound of PM per ton (lb/ton) of metal charged; or

(iv) Maintaining the average total metal HAP mass emissions rate at or below 0.008 pound of total metal HAP per ton (lb/ton) of metal charged.

(3) For each cupola metal melting furnace or electric arc metal melting furnace at new iron and steel foundry,

(i) Maintaining the average PM concentration in the exhaust stream at or below 0.002 gr/dscf; or

(ii) Maintaining the average total metal HAP concentration in the exhaust stream at or below 0.0002 gr/dscf.

(4) For each electric induction metal melting furnace or scrap preheater at a new iron and steel foundry,

(i) Maintaining the average PM concentration in the exhaust stream at or below 0.001 gr/dscf; or

(ii) Maintaining the average total metal HAP concentration in the exhaust stream at or below 0.0008 gr/dscf.

(5) For each pouring station at an existing iron and steel foundry,

(i) Maintaining the average PM concentration in the exhaust stream at or below 0.010 gr/dscf; or
(i) Maintaining the average total metal HAP concentration in the exhaust stream at or below 0.0008 gr/dscf.

(ii) Maintaining the average total metal HAP concentration in the exhaust stream at or below 0.0002 gr/dscf.

(6) For each pouring area or pouring station at a new iron and steel foundry,

(i) Maintaining the average PM concentration in the exhaust stream at or below 0.002 gr/dscf; or

(ii) Maintaining the average total metal HAP concentration in the exhaust stream at or below 0.0002 gr/dscf.

(7) For each building or structure housing any iron and steel foundry emissions source at the iron and steel foundry, maintaining the opacity of any fugitive emissions from foundry operations discharges to the atmosphere at or below 20 percent opacity (6-minute average), except for one 6-minute average per hour that does not exceed 27 percent opacity.

(8) For each cupola metal melting furnace at a new or existing iron and steel foundry, maintaining the average VOHAP concentration in the exhaust stream at or below 20 ppmv corrected to 10 percent oxygen.

(9) For each scrap preheater at an existing new iron and steel foundry that does not comply with the work practice standard in §63.7700(e)(1) or (2) and for each scrap preheater at a new iron and steel foundry that does not comply with the work practice standard in §63.7700(f), maintaining the average VOHAP concentration in the exhaust stream at or below 20 ppmv.

(10) For one or more automated conveyor and pallet cooling lines or automated shakeout lines that use a sand mold system at a new iron and steel foundry,

(i) Maintaining the 3-hour flow-weighted average VOHAP concentration in the exhaust stream at or below 20 ppmv;

(ii) Inspecting and maintaining each CEMS according to the requirements of §63.7741(g) and recording all information needed to document conformance with these requirements; and

(iii) Collecting and reducing monitoring data for according to the requirements of §63.7741(g) and recording all information needed to document conformance with these requirements.

(11) For each TEA cold box mold or core making line at a new or existing iron and steel foundry, maintaining a 99 percent reduction in the VOHAP concentration in the exhaust stream or maintaining the average VOHAP concentration in the exhaust stream at or below 1 ppmv.

(12) Conducting subsequent performance tests at least every 5 years for each emissions source subject to an emissions limit for PM, total metal HAP, VOHAP, or TEA in §63.7690(a) and subsequent performance tests at least every 6 months for each building or structure subject to the opacity limit in §63.7690(a)(7).

(b) You must demonstrate continuous compliance for each capture system subject to an operating limit in §63.7690(b)(1) by meeting the requirements in paragraphs (b)(1) and (2) of this section.

(1) Operating the capture system at or above the lowest values or settings established for the operating limits in your operation and maintenance plan; and

(2) Monitoring the capture system according to the requirements in §63.7740(a) and collecting, reducing, and recording the monitoring data for each of the operating limit parameters according to the applicable requirements in this subpart.

(c) For each baghouse,

(1) Inspecting and maintaining each baghouse according to the requirements of §63.7740(c)(1) through (8) and recording all information needed to document conformance with these requirements; and

(2) If the baghouse is equipped with a bag leak detection system, maintaining records of the times the bag leak detection system sounded, and for each valid alarm, the time you initiated corrective action, the corrective action taken, and the date on which corrective action was completed.

(d) For each wet scrubber that is subject to the operating limits in §63.7690(b)(2), you must demonstrate continuous compliance by:

(1) Maintaining the 3-hour average pressure drop and 3-hour average scrubber water flow rate at levels no lower than those established during the initial or subsequent performance test;

(2) Inspecting and maintaining each CPMS according to the requirements of
(c) and recording all information needed to document conformance with these requirements; and

(3) Collecting and reducing monitoring data for pressure drop and scrubber water flow rate according to the requirements of §63.7741(f) and recording all information needed to document conformance with these requirements.

(e) For each combustion device that is subject to the operating limit in §63.7690(b3), you must demonstrate continuous compliance by:

(1) Maintaining the 15-minute average combustion zone temperature at a level no lower than 1,300 °F;

(2) Inspecting and maintaining each CPMS according to the requirements of §63.7741(d) and recording all information needed to document conformance with these requirements; and

(3) Collecting and reducing monitoring data for combustion zone temperature according to the requirements of §63.7741(f) and recording all information needed to document conformance with these requirements.

(f) For each combustion device that is subject to the operating limit in §63.7690(b4), you must demonstrate continuous compliance by:

(1) Maintaining the 3-hour average combustion zone temperature at a level no lower that established during the initial or subsequent performance test;

(2) Inspecting and maintaining each CPMS according to the requirements of §63.7741(d) and recording all information needed to document conformance with these requirements; and

(3) Collecting and reducing monitoring data for combustion zone temperature according to the requirements of §63.7741(f) and recording all information needed to document conformance with these requirements.

(g) For each acid wet scrubber subject to the operating limits in §63.7690(b5), you must demonstrate continuous compliance by:

(1) Maintaining the 3-hour average scrubbing liquid flow rate at a level no lower than the level established during the initial or subsequent performance test;

(2) Maintaining the 3-hour average pH of the scrubber blowdown at a level no higher than 4.5 (if measured by a CPMS) or maintaining the pH level of the scrubber blowdown during each production shift no higher than 4.5;

(3) Inspecting and maintaining each CPMS according to the requirements of §63.7741(e) and recording all information needed to document conformance with these requirements; and

(4) Collecting and reducing monitoring data for scrubbing liquid flow rate and scrubber blowdown pH according to the requirements of §63.7741(f) and recording all information needed to document conformance with these requirements. If the pH level of the scrubber blowdown is measured by a probe and meter, you must demonstrate continuous compliance by maintaining records that document the date, time, and results of each sample taken for each production shift.


§ 63.7744 How do I demonstrate continuous compliance with the work practice standards that apply to me?

(a) You must maintain records that document continuous compliance with the certification requirements in §63.7700(b) or with the procedures in your scrap selection and inspection plan required in §63.7700(c). Your records documenting compliance with the scrap selection and inspection plan must include a copy (kept onsite) of the procedures used by the scrap supplier for either removing accessible mercury switches or for purchasing automobile bodies that have had mercury switches removed, as applicable.

(b) You must keep records of the chemical composition of all catalyst binder formulations applied in each furan warm box mold or core making line at a new or existing iron and steel foundry to demonstrate continuous compliance with the requirements in §63.7700(d).

(c) For a scrap preheater at an existing iron and steel foundry, you must operate and maintain each gas-fired preheater such that the flame directly contacts the scrap charged to demonstrate continuous compliance with the requirements in §63.7700(e1). If you choose to meet the work practice standard in §63.7700(e2), you must
§ 63.7745 How do I demonstrate continuous compliance with the operation and maintenance requirements that apply to me?

(a) For each capture system and control device for an emissions source subject to an emissions limit in § 63.7690(a), you must demonstrate continuous compliance with the operation and maintenance requirements of § 63.7710 by:

1. Making monthly inspections of capture systems and initiating corrective action according to § 63.7710(b)(1) and recording all information needed to document conformance with these requirements;

2. Performing preventative maintenance for each control device according to the preventive maintenance plan required by § 63.7710(b)(3) and recording all information needed to document conformance with these requirements;

3. Operating and maintaining each bag leak detection system according to the site-specific monitoring plan required by § 63.7710(b)(4) and recording all information needed to demonstrate conformance with these requirements;

4. Initiating and completing corrective action for a bag leak detection system alarm according to the corrective action plan required by § 63.7710(b)(5) and recording all information needed to document conformance with these requirements; and

5. Igniting gases from mold vents according to the procedures in the plan required by § 63.7710(b)(6). (Any instance where you fail to follow the procedures is a deviation that must be included in your semiannual compliance report.)

(b) You must maintain a current copy of the operation and maintenance plans required by § 63.7710(b) onsite and available for inspection upon request. You must keep the plans for the life of the iron and steel foundry or until the iron and steel foundry is no longer subject to the requirements of this subpart.

§ 63.7746 What other requirements must I meet to demonstrate continuous compliance?

(a) Deviations. You must report each instance in which you did not meet each emissions limitation in § 63.7690 (including each operating limit) that applies to you. This requirement includes periods of startup, shutdown, and malfunction. You also must report each instance in which you did not meet each work practice standard in § 63.7700 and each operation and maintenance requirement of § 63.7710 that applies to you. These instances are deviations from the emissions limitations, work practice standards, and operation and maintenance requirements in this subpart. These deviations must be reported according to the requirements of § 63.7751.

(b) Startups, shutdowns, and malfunctions. (1) Consistent with the requirements of §§ 63.6(e) and 63.7(e)(1), deviations that occur during a period of startup, shutdown, or malfunction are not violations if you demonstrate to the Administrator's satisfaction that you were operating in accordance with § 63.6(e)(1).

(2) The Administrator will determine whether deviations that occur during a period of startup, shutdown, or malfunction are violations according to the provisions in § 63.6(e).


§ 63.7747 How do I apply for alternative monitoring requirements for a continuous emissions monitoring system?

(a) You may request an alternative monitoring method to demonstrate compliance with the VOHAP emissions limits in § 63.7690(a)(10) for automated pallet cooling lines or automated shakeout lines at a new iron and steel
Environmental Protection Agency § 63.7751

foundry according to the procedures in this section.

(b) You can request approval to use an alternative monitoring method in the notification of construction or reconstruction for new sources, or at any time.

c) You must submit a monitoring plan that includes a description of the control technique or pollution prevention technique, a description of the continuous monitoring system or method including appropriate operating parameters that will be monitored, test results demonstrating compliance with the emissions limit, operating limit(s) (if applicable) determined according to the test results, and the frequency of measuring and recording to establish continuous compliance. If applicable, you must also include operation and maintenance requirements for the monitors.

d) The monitoring plan is subject to approval by the Administrator. Use of the alternative monitoring method must not begin until approval is granted by the Administrator.

§ 63.7751 What reports must I submit and when?

(a) Compliance report due dates. Unless the Administrator has approved a different schedule, you must submit a semiannual compliance report to your permitting authority according to the requirements specified in paragraphs (a)(1) through (5) of this section.

1) The first compliance report must cover the period beginning on the compliance date that is specified for your iron and steel foundry by §63.7683 and ending on June 30 or December 31, whichever date comes first after the compliance date that is specified for your iron and steel foundry.

2) The first compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date comes first after the compliance date that is specified for your iron and steel foundry.

3) 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) Each subsequent compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date comes first after the end of the semiannual reporting period.

(5) For each iron and steel foundry that is subject to permitting regulations pursuant to 40 CFR part 70 or 40 CFR part 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 the dates specified in paragraphs (a)(1) through (4) of this section.

(b) Compliance report contents. Each compliance report must include the information specified in paragraphs (b)(1) through (3) of this section and, as applicable, paragraphs (b)(4) through (8) of this section.

(1) Company name and address.

(2) Statement by a responsible official, with that official’s name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report.

(3) Date of report and beginning and ending dates of the reporting period.

(4) If you had a startup, shutdown, or malfunction during the reporting period and you took action consistent with your startup, shutdown, and malfunction plan, the compliance report must include the information in §63.10(d)(5)(i).

(b) Compliance report contents. Each compliance report must include the information specified in paragraphs (b)(1) through (3) of this section and, as applicable, paragraphs (b)(4) through (8) of this section.

(1) Company name and address.

(2) Statement by a responsible official, with that official’s name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report.

(3) Date of report and beginning and ending dates of the reporting period.

(4) If you had a startup, shutdown, or malfunction during the reporting period and you took action consistent with your startup, shutdown, and malfunction plan, the compliance report must include the information in §63.10(d)(5)(I).

(5) If there were no deviations from any emissions limitations (including operating limit), work practice standards, or operation and maintenance requirements, a statement that there were no deviations from the emissions limitations, work practice standards, or operation and maintenance requirements during the reporting period.

(6) If there were no periods during which a continuous monitoring system (including a CPMS or CEMS) was out-of-control as specified by §63.8(c)(7), a statement that there were no periods during which the CPMS was out-of-control during the reporting period.

(7) For each deviation from an emissions limitation (including operating limit) that occurs at an iron and steel foundry for which you are not using a continuous monitoring system (including a CPMS or CEMS) to comply with an emissions limitation or work practice standard required in this subpart, the compliance report must contain the information specified in paragraphs (b)(1) through (4) and (b)(7)(i) and (ii) of this section. This requirement includes periods of startup, shutdown, and malfunction.

(i) The total operating time of each emissions source during the reporting period.

(ii) Information on the number, duration, and cause of deviations (including unknown cause) as applicable and the corrective action taken.

(8) For each deviation from an emissions limitation (including an operating limit) or work practice standard occurring at an iron and steel foundry where you are using a continuous monitoring system (including a CPMS or CEMS) to comply with the emissions limitation or work practice standard in this subpart, you must include the information specified in paragraphs (b)(1) through (4) and (b)(8)(i) through (xii) of this section. This requirement includes periods of startup, shutdown, and malfunction.

(i) The date and time that each malfunction started and stopped.

(ii) The date and time that each continuous monitoring system was inoperative, except for zero (low-level) and high-level checks.

(iii) The date, time, and duration that each continuous monitoring system was out-of-control, including the information in §63.8(c)(8).

(iv) The date and time that each deviation started and stopped, and whether each deviation occurred during a period of startup, shutdown, or malfunction or during another period.

(v) A summary of the total duration of the deviations during the reporting period and the total duration as a percent of the total source operating time during that reporting period.

(vi) A breakdown of the total duration of the deviations during the reporting period into those that are due to startup, shutdown, control equipment problems, process problems, other known causes, and unknown causes.

(vii) A summary of the total duration of continuous monitoring system downtime during the reporting period and the total duration of continuous
Monitoring system downtime as a percent of the total source operating time during the reporting period.

(viii) A brief description of the process units.

(ix) A brief description of the continuous monitoring system.

(x) The date of the latest continuous monitoring system certification or audit.

(xi) A description of any changes in continuous monitoring systems, processes, or controls since the last reporting period.

(c) Immediate startup, shutdown, and malfunction report. If you had a startup, shutdown, or malfunction during the semiannual reporting period that was not consistent with your startup, shutdown, and malfunction plan and the source exceeds any applicable emissions limitation in §63.7690, you must submit an immediate startup, shutdown, and malfunction report according to the requirements of §63.10(d)(5)(ii).

(d) Part 70 monitoring report. If you have obtained a title V operating permit for an iron and steel foundry pursuant to 40 CFR part 70 or 40 CFR part 71, you must report all deviations as defined in this subpart in the semiannual monitoring report required by 40 CFR 70.6(a)(3)(i)(A) or 40 CFR 71.6(a)(3)(ii)(A). If you submit a compliance report for an iron and steel foundry along with, or as part of, the semiannual monitoring report required by 40 CFR 70.6(a)(3)(ii)(A) or 40 CFR 71.6(a)(3)(ii)(A), and the compliance report includes all the required information concerning deviations from any emissions limitation or operation and maintenance requirement in this subpart, submission of the compliance report satisfies any obligation to report the same deviations in the semiannual monitoring report. However, submission of a compliance report does not otherwise affect any obligation you may have to report deviations from permit requirements for an iron and steel foundry to your permitting authority.


§ 63.7753 In what form and for how long must I keep my records?

(a) You must keep your records in a form suitable and readily available for
expeditious review, according to the requirements of §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 onsite for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record according to the requirements in §63.10(b)(1). You can keep the records for the previous 3 years offsite.

OTHER REQUIREMENTS AND INFORMATION

§63.7760 What parts of the General Provisions apply to me?

Table 1 to this subpart shows which parts of the General Provisions in §§63.1 through 63.15 apply to you.

§63.7761 Who implements and enforces this subpart?

(a) This subpart can be implemented and enforced by us, the U.S. Environmental Protection Agency (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, in addition to 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 if implementation and enforcement of 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 cannot be delegated to State, local, or tribal agencies are specified in paragraphs (c)(1) through (4) of this section.

(1) Approval of alternatives to non-opacity emissions limitations in §63.7690 and work practice standards in §63.7700 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.

DEFINITIONS

§63.7765 What definitions apply to this subpart?

Terms used in this subpart are defined in the Clean Air Act (CAA), in §63.2, and in this section.

Automated conveyor and pallet cooling line means any dedicated conveyor line or area used for cooling molds received from pouring stations.

Automated shakeout line means any mechanical process unit designed for and dedicated to separating a casting from a mold. These mechanical processes include, but are not limited to, shaker decks, rotary separators, and high-frequency vibration units. Automated shakeout lines do not include manual processes for separating a casting from a mold, such as personnel using a hammer, chisel, pick ax, sledge hammer, or jackhammer.

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 upset conditions. 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.

Binder chemical means a component of a system of chemicals used to bind sand together into molds, mold sections, and cores through chemical reaction as opposed to pressure.

Capture system means the collection of components used to capture gases and fumes released from one or more emissions points and then convey the captured gas stream to a control device or to the atmosphere. A capture system may include, but is not limited to, the following components as applicable to a given capture system design: duct
Environmental Protection Agency

§ 63.7765

intake devices, hoods, enclosures, ductwork, dampers, manifolds, plenums, and fans.

*Cold box mold or core making line* means a mold or core making line in which the formed aggregate is hardened by catalysis with a gas.

*Combustion device* means an afterburner, thermal incinerator, or scrap preheater.

*Conveyance* means the system of equipment that is designed to capture pollutants at the source, convey them through ductwork, and exhaust them using forced ventilation. A conveyance may, but does not necessarily include, control equipment designed to reduce emissions of the pollutants. Emissions that are released through windows, vents, or other general building ventilation or exhaust systems are not considered to be discharged through a conveyance.

*Cooling* means the process of molten metal solidification within the mold and subsequent temperature reduction prior to shakeout.

*Cupola* means a vertical cylindrical shaft furnace that uses coke and forms of iron and steel such as scrap and foundry returns as the primary charge components and melts the iron and steel through combustion of the coke by a forced upward flow of heated air.

*Deviation* means any instance in which an affected source or an owner or operator of such an affected source:

1. Fails to meet any requirement or obligation established by this subpart including, but not limited to, any emissions limitation (including operating limits), work practice standard, or operation and maintenance requirement;

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 iron and steel foundry required to obtain such a permit; or

3. Fails to meet any emissions limitation (including operating limits) or work practice standard in this subpart during startup, shutdown, or malfunction, regardless of whether or not such failure is permitted by this subpart.

A deviation is not always a violation. The determination of whether a deviation constitutes a violation of the standard is up to the discretion of the entity responsible for enforcement of the standards.

*Electric arc furnace* means a vessel in which forms of iron and steel such as scrap and foundry returns are melted through resistance heating by an electric current flowing through the arcs formed between the electrodes and the surface of the metal and also flowing through the metal between the arc paths.

*Electric induction furnace* means a vessel in which forms of iron and steel such as scrap and foundry returns are melted though resistance heating by an electric current that is induced in the metal by passing an alternating current through a coil surrounding the metal charge or surrounding a pool of molten metal at the bottom of the vessel.

*Emissions limitation* means any emissions limit or operating limit.

*Exhaust stream* means gases emitted from a process through a conveyance as defined in this subpart.

*Free organic liquids* means material that fails the paint filter test by EPA Method 9095A (incorporated by reference—see § 63.14). That is, if any portion of the material passes through and drops from the filter within the 5-minute test period, the material contains free liquids.

*Fresh acid solution* means a sulfuric acid solution used for the control of triethylamine emissions that has a pH of 2.0 or less.

*Fugitive emissions* means any pollutant released to the atmosphere that is not discharged through a conveyance as defined in this subpart.

*Furan warm box mold or core making line* means a mold or core making line in which the binder chemical system used is that system commonly designated as a furan warm box system by the foundry industry.

*Hazardous air pollutant* means any substance on the list originally established in 112(b)(1) of the CAA and subsequently amended as published in the Code of Federal Regulations.

*Iron and steel foundry* means a facility or portion of a facility that melts scrap, ingot, and/or other forms of iron and/or steel and pours the resulting molten metal into molds to produce final or near final shape products for
introduction into commerce. Research and development facilities and operations that only produce non-commercial castings are not included in this definition.

_Metal melting furnace_ means a cupola, electric arc furnace, or electric induction furnace that converts scrap, foundry returns, and/or other solid forms of iron and/or steel to a liquid state. This definition does not include a holding furnace, an argon oxygen decarburization vessel, or ladle that receives molten metal from a metal melting furnace, to which metal ingots or other material may be added to adjust the metal chemistry.

_Mold or core making line_ means the collection of equipment that is used to mix an aggregate of sand and binder chemicals, form the aggregate into final shape, and harden the formed aggregate. This definition does not include a line for making green sand molds or cores.

_Mold vent_ means an intentional opening in a mold through which gases containing pyrolysis products of organic mold and core constituents produced by contact with or proximity to molten metal normally escape the mold during and after metal pouring.

_Off blast_ means those periods of cupola operation when the cupola is not actively being used to produce molten metal. Off blast conditions include cupola startup when air is introduced to the cupola to preheat the sand bed and other cupola startup procedures as defined in the startup, shutdown, and malfunction plan. Off blast conditions also include idling conditions when the blast air is turned off or down to the point that the cupola does not produce additional molten metal.

_On blast_ means those periods of cupola operation when combustion (blast) air is introduced to the cupola furnace and the furnace is capable of producing molten metal. On blast conditions are characterized by both blast air introduction and molten metal production.

_Pouring area_ means an area, generally associated with floor and pit molding operations, in which molten metal is brought to each individual mold. Pouring areas include all pouring operations that do not meet the definition of a pouring station.

_Pouring station_ means the fixed location to which molds are brought in a continuous or semicontinuous manner to receive molten metal, after which the molds are moved to a cooling area.

_Responsible official_ means responsible official as defined in §63.2.

_Scrap preheater_ means a vessel or other piece of equipment in which metal scrap that is to be used as melting furnace feed is heated to a temperature high enough to eliminate volatile impurities or other tramp materials by direct flame heating or similar means of heating. Scrap dryers, which solely remove moisture from metal scrap, are not considered to be scrap preheaters for purposes of this subpart.

_Scrubber blowdown_ means liquor or slurry discharged from a wet scrubber that is either removed as a waste stream or processed to remove impurities or adjust its composition or pH before being returned to the scrubber.

_Total metal HAP_ means, for the purposes of this subpart, the sum of the concentrations of antimony, arsenic, beryllium, cadmium, chromium, cobalt, lead, manganese, mercury, nickel, and selenium as measured by EPA Method 29 (40 CFR part 60, appendix A). Only the measured concentration of the listed analytes that are present at concentrations exceeding one-half the quantitation limit of the analytical method are to be used in the sum. If any of the analytes are not detected or are detected at concentrations less than one-half the quantitation limit of the analytical method, the concentration of those analytes will be assumed to be zero for the purposes of calculating the total metal HAP for this subpart.

_Work practice standard_ means any design, equipment, work practice, or operational standard, or combination thereof, that is promulgated pursuant to section 112(h) of the CAA.

# Table 1 to Subpart EEEE of Part 63—Applicability of General Provisions to Subpart EEEE

[As stated in §63.7760, you must meet each requirement in the following table that applies to you.]

<table>
<thead>
<tr>
<th>Citation</th>
<th>Subject</th>
<th>Applies to Subpart EEEE?</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>63.1</td>
<td>Applicability</td>
<td>Yes.</td>
<td></td>
</tr>
<tr>
<td>63.2</td>
<td>Definitions</td>
<td>Yes.</td>
<td></td>
</tr>
<tr>
<td>63.3</td>
<td>Units and abbreviations</td>
<td>Yes.</td>
<td></td>
</tr>
<tr>
<td>63.4</td>
<td>Prohibited activities</td>
<td>Yes.</td>
<td></td>
</tr>
<tr>
<td>63.5</td>
<td>Construction/reconstruction</td>
<td>Yes.</td>
<td></td>
</tr>
<tr>
<td>63.6(a)–(g)</td>
<td>Compliance with standards and maintenance requirements.</td>
<td>Yes.</td>
<td></td>
</tr>
<tr>
<td>63.6(h)</td>
<td>Opacity and visible emissions standards.</td>
<td>Yes.</td>
<td></td>
</tr>
<tr>
<td>63.6(i)–(j)</td>
<td>Compliance extension and Presidential compliance exemption.</td>
<td>Yes.</td>
<td></td>
</tr>
<tr>
<td>63.7(a)(1)–(a)(2)</td>
<td>Applicability and performance test dates.</td>
<td>No</td>
<td>Subpart EEEE specifies applicability and performance test dates.</td>
</tr>
<tr>
<td>63.7(a)(3), (b)–(h)</td>
<td>Performance testing requirements.</td>
<td>Yes.</td>
<td></td>
</tr>
<tr>
<td>63.8(a)(1)–(a)(2), (b), (c)(1)–(c)(3), (d)(6)–(c)(8), (d), (e), (f)(1)–(f)(6), (g)(1)–(g)(4).</td>
<td>Monitoring requirements</td>
<td>Yes.</td>
<td>Subpart EEEE specifies requirements for alternative monitoring systems.</td>
</tr>
<tr>
<td>63.8(a)(4)</td>
<td>Additional monitoring requirements for control devices in §63.11.</td>
<td>No</td>
<td>Subpart EEEE does not require flares.</td>
</tr>
<tr>
<td>63.8(c)(4)</td>
<td>Continuous monitoring system (CMS) requirements.</td>
<td>No</td>
<td>Subpart EEEE specifies requirements for operation of CMS and CEMS.</td>
</tr>
<tr>
<td>63.8(c)(5)</td>
<td>Continuous opacity monitoring system (COMS) Minimum Procedures.</td>
<td>No</td>
<td>Subpart EEEE does not require COMS.</td>
</tr>
<tr>
<td>63.8(g)(5)</td>
<td>Data reduction.</td>
<td>No</td>
<td>Subpart EEEE specifies data reduction requirements.</td>
</tr>
<tr>
<td>63.9</td>
<td>Notification requirements</td>
<td>Yes.</td>
<td>Except for opacity performance tests, Subpart EEEE allows the notification of compliance status to be submitted with the semiannual compliance report or the semianual part 70 monitoring report.</td>
</tr>
<tr>
<td>63.10(a)–(b), (c)(1)–(b), (c)(9)–(15), (d)(1)–(2), (e)(1)–(2), (f)</td>
<td>Recordkeeping and reporting requirements.</td>
<td>Yes.</td>
<td>Additional records for CMS in §63.10(c)(1)–(b), (9)–(15) apply only to CEMS.</td>
</tr>
<tr>
<td>63.10(c)(7)–(8)</td>
<td>Records of excess emissions and parameter monitoring exceedances for CMS.</td>
<td>No</td>
<td>Subpart EEEE specifies records requirements.</td>
</tr>
<tr>
<td>63.10(d)(3)</td>
<td>Reporting opacity or visible emissions observations.</td>
<td>Yes.</td>
<td></td>
</tr>
<tr>
<td>63.10(e)(3)</td>
<td>Excess emissions reports</td>
<td>No</td>
<td>Subpart EEEE specifies requirements for reporting.</td>
</tr>
<tr>
<td>63.10(e)(4)</td>
<td>Reporting COMS data</td>
<td>No</td>
<td>Subpart EEEE data does not require COMS.</td>
</tr>
<tr>
<td>63.11</td>
<td>Control device requirements</td>
<td>No</td>
<td>Subpart EEEE does not require flares.</td>
</tr>
<tr>
<td>63.12</td>
<td>State authority and delegations.</td>
<td>Yes.</td>
<td></td>
</tr>
<tr>
<td>63.13–63.15</td>
<td>Addresses of State air pollution control agencies and EPA regional offices. Incorporation by reference. Availability of information and confidentiality.</td>
<td>Yes.</td>
<td></td>
</tr>
</tbody>
</table>

Subpart FFFFF—National Emission Standards for Hazardous Air Pollutants for Integrated Iron and Steel Manufacturing Facilities

Source: 68 FR 27663, May 20, 2003, unless otherwise noted.

WHAT THIS SUBPART COVERS

§ 63.7780 What is the purpose of this subpart?

This subpart establishes national emission standards for hazardous air pollutants (NESHAP) for integrated iron and steel manufacturing facilities. This subpart also establishes requirements to demonstrate initial and continuous compliance with all applicable emission limitations and operation and maintenance requirements in this subpart.

§ 63.7781 Am I subject to this subpart?

You are subject to this subpart if you own or operate an integrated iron and steel manufacturing facility that is (or is part of) a major source of hazardous air pollutants (HAP) emissions. Your integrated iron and steel manufacturing facility is a major source of HAP if it emits or has the potential to emit any single HAP at a rate of 10 tons or more per year or any combination of HAP at a rate of 25 tons or more per year.

§ 63.7782 What parts of my plant does this subpart cover?

(a) This subpart applies to each new and existing affected source at your integrated iron and steel manufacturing facility.

(b) The affected sources are each new or existing sinter plant, blast furnace, and basic oxygen process furnace (BOPF) shop at your integrated iron and steel manufacturing facility.

(c) This subpart covers emissions from the sinter plant windbox exhaust, discharge end, and sinter cooler; the blast furnace casthouse; and the BOPF shop including each individual BOPF and shop ancillary operations (hot metal transfer, hot metal desulfurization, slag skimming, and ladle metallurgy).

(d) A sinter plant, blast furnace, or BOPF shop at your integrated iron and steel manufacturing facility is existing if you commenced construction or reconstruction of the affected source before July 13, 2001.

(e) A sinter plant, blast furnace, or BOPF shop at your integrated iron and steel manufacturing facility is new if you commence construction or reconstruction of the affected source on or after July 13, 2001. An affected source is reconstructed if it meets the definition of reconstruction in § 63.2.

§ 63.7783 When do I have to comply with this subpart?

(a) If you have an existing affected source, you must comply with each emission limitation and operation and maintenance requirement in this subpart that applies to you by the dates specified in paragraphs (a)(1) and (2) of this section.

(1) No later than May 22, 2006 for all emissions sources at an existing affected source except for a sinter cooler at an existing sinter plant.

(2) No later than January 13, 2007 for a sinter cooler at an existing sinter plant.

(b) If you have a new affected source and its initial startup date is on or before May 20, 2003, then you must comply with each emission limitation and operation and maintenance requirement in this subpart that applies to you by May 20, 2003.

(c) If you have a new affected source and its initial startup date is after May 20, 2003, you must comply with each emission limitation and operation and maintenance requirement in this subpart that applies to you upon initial startup.

(d) If your integrated iron and steel manufacturing facility is not a major source and becomes a major source of HAP, the following compliance dates apply to you.

(1) Any portion of the existing integrated iron and steel manufacturing facility that becomes a new affected source or a new reconstructed source must be in compliance with this subpart upon startup.

(2) All other parts of the integrated iron and steel manufacturing facility
must be in compliance with this subpart no later than 2 years after it becomes a major source.

(e) You must meet the notification and schedule requirements in §63.7840. Several of these notifications must be submitted before the compliance date for your affected source.


EMISSION LIMITATIONS

§63.7790 What emission limitations must I meet?

(a) You must meet each emission limit and opacity limit in Table 1 to this subpart that applies to you.

(b) You must meet each operating limit for capture systems and control devices in paragraphs (b)(1) through (3) of this section that applies to you.

(1) You must operate each capture system applied to emissions from a sinter plant discharge end or blast furnace causthouse or to secondary emissions from a BOPF at or above the lowest value or settings established for the operating limits in your operation and maintenance plan;

(2) For each venturi scrubber applied to meet any particulate emission limit in Table 1 to this subpart, you must maintain the hourly average pressure drop and scrubber water flow rate at or above the minimum levels established during the initial performance test.

(3) For each electrostatic precipitator applied to emissions from a BOPF, you must maintain the hourly average opacity of emissions exiting the control device at or below 10 percent.

(c) An owner or operator who uses an air pollution control device other than a baghouse, venturi scrubber, or electrostatic precipitator must submit a description of the device; test results collected in accordance with §63.7822 verifying the performance of the device for reducing emissions of particulate matter to the atmosphere to the levels required by this subpart; a copy of the operation and maintenance plan required in §63.7800(b); and appropriate operating parameters that will be monitored to maintain continuous compliance with the applicable emission limitation(s). The monitoring plan identifying the operating parameters to be monitored is subject to approval by the Administrator.

(d) For each sinter plant, you must either:

(1) Maintain the 30-day rolling average oil content of the feedstock at or below 0.02 percent; or

(2) Maintain the 30-day rolling average of volatile organic compound emissions from the windbox exhaust stream at or below 0.2 lb/ton of sinter.


OPERATION AND MAINTENANCE REQUIREMENTS

§63.7800 What are my operation and maintenance requirements?

(a) As required by §63.6(e)(1)(i), you must always operate and maintain your affected source, including air pollution control and monitoring equipment, in a manner consistent with good air pollution control practices for minimizing emissions at least to the levels required by this subpart.

(b) You must prepare and operate at all times according to a written operation and maintenance plan for each capture system or control device subject to an operating limit in §63.7790(b). Each plan must address the elements in paragraphs (b)(1) through (7) of this section.

(1) Monthly inspections of the equipment that is important to the performance of the total capture system (e.g., pressure sensors, dampers, and damper switches). This inspection must 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 the ductwork, and fan erosion). The operation and maintenance plan also must include requirements to repair any defect or deficiency in the capture system before the next scheduled inspection.

(2) Preventative maintenance for each control device, including a preventative maintenance schedule that is consistent with the manufacturer’s instructions for routine and long-term maintenance.
§ 63.7810 What are my general requirements for complying with this subpart?

(a) You must be in compliance with the emission limitations and operation monitoring systems (COMS). In the event a bag leak detection system alarm is triggered or emissions from a baghouse equipped with a COMS exceed an hourly average opacity of 5 percent, you must initiate corrective action to determine the cause of the alarm within 1 hour of the alarm, initiate corrective action to correct the cause of the problem within 24 hours of the alarm, and complete the corrective action as soon as practicable. Corrective actions may include, but are not limited to:

(i) Inspecting the baghouse for air leaks, torn or broken bags or filter media, or any other condition that may cause an increase in emissions.
(ii) Sealing off defective bags or filter media.
(iii) Replacing defective bags or filter media or otherwise repairing the control device.
(iv) Sealing off a defective baghouse compartment.
(v) Cleaning the bag leak detection system probe, or otherwise repair the bag leak detection system.
(vi) Shutting down the process producing the particulate emissions.

§ 63.7810 Operating limits for each capture system applied to emissions from a sinter plant discharge end or blast furnace casthouse, or to secondary emissions from a BOPF. You must establish the operating limits according to the requirements in paragraphs (b)(3)(i) through (iii) of this section.

(i) Select operating limit parameters appropriate for the capture system design that are representative and reliable indicators of the performance of the capture system. At a minimum, you must use appropriate operating limit parameters that indicate the level of the ventilation draft and the damper position settings for the capture system when operating to collect emissions, including revised settings for seasonal variations. Appropriate operating limit parameters for ventilation draft include, but are not limited to, volumetric flow rate through each separately ducted hood, total volumetric flow rate at the inlet to the control device to which the capture system is vented, fan motor amperage, or static pressure.

(ii) For each operating limit parameter selected in paragraph (b)(3)(i) of this section, designate the value or setting for the parameter at which the capture system operates during the process operation. If your operation allows for more than one process to be operating simultaneously, designate the value or setting for the parameter at which the capture system operates during each possible configuration that you may operate.

(iii) Include documentation in your plan to support your selection of the operating limits established for the capture system. This documentation must include a description of the capture system design, a description of the capture system operating during production, a description of each selected operating limit parameter, a rationale for why you chose the parameter, a description of the method used to monitor the parameter according to the requirements of § 63.7830(a), and the data used to set the value or setting for the parameter for each of your process configurations.

§ 63.7810 Corrective action procedures for venturi scrubbers equipped with continuous parameter monitoring systems (CPMS). In the event a venturi scrubber exceeds the operating limit in §63.7790(b)(2), you must take corrective actions consistent with your site-specific monitoring plan in accordance with §63.7831(a).

§ 63.7810 Corrective action procedures for electrostatic precipitators equipped with COMS. In the event an electrostatic precipitator exceeds the operating limit in §63.7790(b)(3), you must take corrective actions consistent with your site-specific monitoring plan in accordance with §63.7831(a).

§ 63.7810 Procedures for determining and recording the daily sinter plant production rate in tons per hour.

and maintenance requirements in this subpart at all times, except during periods of startup, shutdown, and malfunction as defined in §63.2.

(b) During the period between the compliance date specified for your affected source in §63.7783 and the date upon which continuous monitoring systems have been installed and certified and any applicable operating limits have been set, you must maintain a log detailing the operation and maintenance of the process and emissions control equipment.

(c) You must develop a written startup, shutdown, and malfunction plan according to the provisions in §63.6(e)(3).

§63.7821 When must I conduct subsequent performance tests?

(a) You must conduct subsequent performance tests to demonstrate compliance with all applicable PM and opacity limits in Table 1 to this subpart at the frequencies specified in paragraphs (b) through (d) of this section.

(b) For each sinter cooler at an existing sinter plant and each emissions unit equipped with a control device other than a baghouse, you must conduct subsequent performance tests no less frequently than twice (at mid-term and renewal) during each term of your title V operating permit.

(c) For each emissions unit equipped with a baghouse, you must conduct subsequent performance tests no less frequently than once during each term of your title V operating permit.

(d) For sources without a title V operating permit, you must conduct subsequent performance tests every 2.5 years.

§63.7822 What test methods and other procedures must I use to demonstrate initial compliance with the emission limits for particulate matter?

(a) You must conduct each performance test that applies to your affected source according to the requirements in §63.7(e)(1) and the conditions detailed in paragraphs (b) through (i) of this section.

(b) To determine compliance with the applicable emission limit for particulate matter in Table 1 to this subpart, follow the test methods and procedures...
in paragraphs (b)(1) and (2) of this section.

(1) Determine the concentration of particulate matter according to the following test methods in appendix A to part 60 of this chapter:

(i) Method 1 to select sampling port locations and the number of traverse points. Sampling ports must be located at the outlet of the control device and prior to any releases to the atmosphere.

(ii) Method 2, 2F, or 2G to determine the volumetric flow rate of the stack gas.

(iii) Method 3, 3A, or 3B to determine the dry molecular weight of the stack gas.

(iv) Method 4 to determine the moisture content of the stack gas.

(v) Method 5, 5D, or 17, as applicable, to determine the concentration of particulate matter (front half filterable catch only).

(2) Collect a minimum sample volume of 60 dry standard cubic feet (dscf) of gas during each particulate matter test run. Three valid test runs are needed to comprise a performance test.

(c) For each sinter plant windbox exhaust stream, you must complete the requirements of paragraphs (c)(1) and (2) of this section:

(1) Follow the procedures in your operation and maintenance plan for measuring and recording the sinter production rate for each test run in tons per hour; and

(2) Compute the process-weighted mass emissions \(E_p\) for each test run using Equation 1 of this section as follows:

\[
E_p = \frac{C \times Q}{P \times K} \quad \text{(Eq. 1)}
\]

Where:

\(E_p\) = Process-weighted mass emissions of particulate matter, lb/ton;

\(C\) = Concentration of particulate matter, grains per dry standard cubic foot (gr/dscf);

\(Q\) = Volumetric flow rate of stack gas, dry standard cubic foot per hour (dscf/hr);

\(P\) = Production rate of sinter during the test run, tons/hr; and

\(K\) = Conversion factor, 7,000 grains per pound (gr/lb).

(d) If you apply two or more control devices in parallel to emissions from a sinter plant discharge end or a BOPF, compute the average flow-weighted concentration for each test run using Equation 2 of this section as follows:

\[
C_W = \frac{\sum_{i=1}^{n} C_i Q_i}{\sum_{i=1}^{n} Q_i} \quad \text{(Eq. 2)}
\]

Where:

\(C_w\) = Flow-weighted concentration, gr/dscf;

\(C_i\) = Concentration of particulate matter from exhaust stream "i", gr/dscf; and

\(Q_i\) = Volumetric flow rate of effluent gas from exhaust stream "i", dry standard cubic foot per minute (dscfm).

(e) For a control device applied to emissions from a blast furnace casthoude, sample for an integral number of furnace tapping operations sufficient to obtain at least 1 hour of sampling for each test run.

(f) For a primary emission control device applied to emissions from a BOPF with a closed hood system, sample only during the primary oxygen blow and do not sample during any subsequent rebows. Continue sampling for each run for an integral number of primary oxygen blows.

(g) For a primary emission control system applied to emissions from a BOPF with an open hood system and for a control device applied solely to secondary emissions from a BOPF, you must complete the requirements of paragraphs (g)(1) and (2) of this section:

(1) Sample only during the steel production cycle. Conduct sampling under conditions that are representative of normal operation. Record the start and end time of each steel production cycle and each period of abnormal operation; and

(2) Sample for an integral number of steel production cycles. The steel production cycle begins when the scrap is charged to the furnace and ends 3 minutes after the slag is emptied from the vessel into the slag pot.

(h) For a control device applied to emissions from BOPF shop ancillary operations (hot metal transfer, skimming, desulfurization, or ladle metallurgy), sample only when the operation(s) is being conducted.
(i) Subject to approval by the permitting authority, you may conduct representative sampling of stacks when there are more than three stacks associated with a process.

§ 63.7823 What test methods and other procedures must I use to demonstrate initial compliance with the opacity limits?

(a) You must conduct each performance test that applies to your affected source according to the requirements in §63.7(h)(5) and the conditions detailed in paragraphs (b) through (d) of this section.

(b) You must conduct each visible emissions performance test such that the opacity observations overlap with the performance test for particulate matter.

(c) To determine compliance with the applicable opacity limit in Table 1 to this subpart for a sinter plant discharge end or a blast furnace causthouse:

(1) Using a certified observer, determine the opacity of emissions according to Method 9 in appendix A to part 60 of this chapter.

(2) Obtain a minimum of 30 6-minute block averages. For a blast furnace causthouse, make observations during tapping of the furnace. Tapping begins when the furnace is opened, usually by creating a hole near the bottom of the furnace, and ends when the hole is plugged.

(d) To determine compliance with the applicable opacity limit in Table 1 to this subpart for BOPF shops:

(1) For an existing BOPF shop:

(i) Using a certified observer, determine the opacity of emissions according to Method 9 in appendix A to part 60 of this chapter except as specified in paragraphs (d)(1)(ii) and (iii) of this section.

(ii) Instead of procedures in section 2.4 of Method 9 in appendix A to part 60 of this chapter, record observations to the nearest 5 percent at 15-second intervals for at least three steel production cycles.

(iii) Instead of procedures in section 2.5 of Method 9 in appendix A to part 60 of this chapter, determine the 3-minute block average opacity from the average of 12 consecutive observations recorded at 15-second intervals.

(2) For a new BOPF shop housing a bottom-blown BOPF:

(i) Using a certified observer, determine the opacity of emissions according to Method 9 in appendix A to part 60 of this chapter.

(ii) Determine the highest and second highest sets of 6-minute block average opacities for each steel production cycle.

(3) For a new BOPF shop housing a top-blown BOPF:

(i) Determine the opacity of emissions according to the requirements for an existing BOPF shop in paragraphs (d)(1)(i) through (iii) of this section.

(ii) Determine the highest and second highest sets of 3-minute block average opacities for each steel production cycle.

(4) Opacity observations must cover the entire steel production cycle and must be made for at least three cycles. The steel production cycle begins when the scrap is charged to the furnace and ends 3 minutes after the slag is emptied from the vessel into the slag pot.

(5) Determine and record the starting and stopping times of the steel production cycle.

(e) To determine compliance with the applicable opacity limit in Table 1 to this subpart for a sinter cooler at an existing sinter plant:

(1) Using a certified observer, determine the opacity of emissions according to Method 9 in appendix A to part 60 of this chapter.

(2) Obtain a minimum of 30 6-minute block averages.

(3) Make visible emission observations of uncovered portions of sinter plant coolers with the observer’s line of sight generally in the direction of the center of the cooler.


§ 63.7824 What test methods and other procedures must I use to establish and demonstrate initial compliance with operating limits?

(a) For each capture system subject to an operating limit in §63.7790(b)(1), you must certify that the system operated during the performance test at the
(a) For each capture system subject to operating limits for opacity in §63.7790(b)(1), you must establish site-specific operating limits according to the procedures in paragraphs (a)(1) through (4) of this section.

(1) Concurrent with all opacity observations, measure and record values for each of the operating limit parameters in your capture system operation and maintenance plan according to the monitoring requirements specified in §63.7830(a).

(2) For any dampers that are manually set and remain at the same position at all times the capture system is operating, the damper position must be visually checked and recorded at the beginning and end of each opacity observation period segment.

(3) Review and record the monitoring data. Identify and explain any times the capture system operated outside the applicable operating limits.

(4) Certify in your performance test report that during all observation period segments, the capture system was operating at the values or settings established in your capture system operation and maintenance plan.

(b) For a venturi scrubber subject to operating limits for pressure drop and scrubber water flow rate in §63.7790(b)(2), you must establish site-specific operating limits according to the procedures in paragraphs (b)(1) and (2) of this section. You may establish the parametric monitoring limit during the initial performance test or during any other performance test run that meets the emission limit.

(1) Using the CPMS required in §63.7830(c), measure and record the pressure drop and scrubber water flow rate during each run of the particulate matter performance test.

(2) Compute and record the hourly average pressure drop and scrubber water flow rate for each individual test run. Your operating limits are the lowest average pressure drop and scrubber water flow rate value in any of the three runs that meet the applicable emission limit.

(c) You may change the operating limits for a capture system or venturi scrubber if you meet the requirements in paragraphs (c)(1) through (3) of this section.

(1) Submit a written notification to the Administrator of your request to conduct a new performance test to revise the operating limit.

(2) Conduct a performance test to demonstrate compliance with the applicable emission limitation in Table 1 to this subpart.

(3) Establish revised operating limits according to the applicable procedures in paragraphs (a) and (b) of this section for a control device or capture system.

(d) For each sinter plant subject to the operating limit for the oil content of the sinter plant feedstock in §63.7790(d)(1), you must demonstrate initial compliance according to the procedures in paragraphs (d)(1) through (3) of this section.

(1) Sample the feedstock at least three times a day (once every 8 hours), composite the three samples each day, and analyze the composited samples using Method 9071B, "n-Hexane Extractable Material (HEM) for Sludge, Sediment, and Solid Samples." (Revision 2, April 1998). Method 9071B is incorporated by reference (see §63.14) and is published in EPA Publication SW–846 "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods."

Record the sampling date and time, oil content values, and sinter produced (tons/day).

(2) Continue the sampling and analysis procedure for 30 consecutive days.

(3) Each day, compute and record the 30-day rolling average using that day’s value and the 29 previous daily values.

(e) To demonstrate initial compliance with the alternative operating limit for volatile organic compound emissions from the sinter plant windbox exhaust stream in §63.7790(d)(2), follow the test methods and procedures in paragraphs (e)(1) through (5) of this section.

(1) Determine the volatile organic compound emissions according to the following test methods in appendix A to part 60 of this chapter:

(i) Method 1 to select sampling port locations and the number of traverse points. Sampling ports must be located at the outlet of the control device and prior to any releases to the atmosphere.
Environmental Protection Agency

§ 63.7825  How do I demonstrate initial compliance with the emission limitations that apply to me?

(a) For each affected source subject to an emission or opacity limit in Table 1 to this subpart, you have demonstrated initial compliance if:

(1) You meet the conditions in Table 2 to this subpart; and

(2) For each capture system subject to the operating limit in §63.7790(b)(1), you have established appropriate site-specific operating limit(s) and have a record of the operating parameter data measured during the performance test in accordance with §63.7824(a)(1); and

(3) For each venturi scrubber subject to the operating limits for pressure drop and scrubber water flow rate in §63.7790(b)(2), you have established appropriate site-specific operating limits and have a record of the pressure drop and scrubber water flow rate measured during the performance test in accordance with §63.7824(b).

(b) For each existing or new sinter plant subject to the operating limit in §63.7790(d)(1), you have demonstrated initial compliance if the 30-day rolling average of the oil content of the feedstock, measured during the initial performance test in accordance with §63.7824(d) is no more than 0.02 percent. For each existing or new sinter plant subject to the alternative operating limit in §63.7790(d)(2), you have demonstrated initial compliance if the 30-day rolling average of the volatile organic compound emissions from the sinter plant windbox exhaust stream, measured during the initial performance test in accordance with §63.7824(e) is no more than 0.2 lb/ton of sinter produced.

(c) For each emission limitation that applies to you, you must submit a notification of compliance status according to §63.7840(e).


§ 63.7826  How do I demonstrate initial compliance with the operation and maintenance requirements that apply to me?

(a) For a capture system applied to emissions from a sinter plant discharge end or blast furnace causthouse or to secondary emissions from a BOPF, you
§ 63.7830  What are my monitoring requirements?

(a) For each control device subject to operating limits in §63.7790(b)(2) or (3), you have demonstrated initial compliance if you meet all of the conditions in paragraphs (a)(1) through (4) of this section.

(1) Prepared the control device operation and maintenance plan according to the requirements of §63.7800(b), including a preventative maintenance schedule and, as applicable, detailed descriptions of the corrective action procedures for baghouses and other control devices;

(2) Submitted a notification of compliance status according to the requirements in §63.7840(e), including a copy of the operation and maintenance plan and your certification that you will operate the control device according to the operating limits set forth in that plan; and

(3) Prepared a site-specific monitoring plan according to the requirements in §63.7831(a).

(b) For each control device subject to operating limits in §63.7790(b)(2) or (3), you have demonstrated initial compliance if you meet all of the conditions in paragraphs (b)(1) through (3) of this section.

(1) Prepared the control device operation and maintenance plan according to the requirements of §63.7800(b), including a preventative maintenance schedule and, as applicable, detailed descriptions of the corrective action procedures for baghouses and other control devices;

(2) Submitted a notification of compliance status according to the requirements in §63.7840(e), including a copy of the operation and maintenance plan; and

(3) Prepared a site-specific monitoring plan according to the requirements in §63.7831(a).

install, operate, and maintain a COMS according to the requirements in §63.7831(h) and monitor the hourly average opacity of emissions exiting each control device stack according to the requirements in §63.7832.

(3) A bag leak detection system and COMS are not required for a baghouse that meets the requirements in paragraphs (b)(3)(i) and (ii) of this section.

(i) The baghouse is a positive pressure baghouse and is not equipped with exhaust gas stacks; and

(ii) The baghouse was installed before August 30, 2005.

(4) You must conduct inspections of each baghouse at the specified frequencies according to the requirements in paragraphs (b)(4)(i) through (viii) of this section.

(i) Monitor the pressure drop across each baghouse cell each day to ensure pressure drop is within the normal operating range identified in the manual.

(ii) Confirm that dust is being removed from hoppers through weekly visual inspections or other means of ensuring the proper functioning of removal mechanisms.

(iii) Check the compressed air supply for pulse-jet baghouses each day.

(iv) Monitor cleaning cycles to ensure proper operation using an appropriate methodology.

(v) Check bag cleaning mechanisms for proper functioning through monthly visual inspection or equivalent means.

(vi) Make monthly visual checks of bag tension on reverse air and shaker-type baghouses to ensure that bags are not kinked (knead or bent) or laying on their sides. You do not have to make this check for shaker-type baghouses using self-tensioning (spring-loaded) devices.

(vii) Confirm the physical integrity of the baghouse through quarterly visual inspections of the baghouse interior for air leaks.

(viii) Inspect fans for wear, material buildup, and corrosion through quarterly visual inspections, vibration detectors, or equivalent means.

(c) For each venturi scrubber subject to the operating limits for pressure drop and scrubber water flow rate in §63.7790(b)(2), you must install, operate, and maintain CPMS according to the requirements in §63.7831(g) and monitor the hourly average pressure drop and water flow rate according to the requirements in §63.7832.

(d) For each electrostatic precipitator subject to the opacity operating limit in §63.7790(b)(3), you must install, operate, and maintain a COMS according to the requirements in §63.7831(h) and monitor the hourly average opacity of emissions exiting each control device stack according to the requirements in §63.7832.

(e) For each sinter plant subject to the operating limit in §63.7790(d), you must either:

(1) Compute and record the 30-day rolling average of the oil content of the feedstock for each operating day using the procedures in §63.7824(d); or

(2) Compute and record the 30-day rolling average of the volatile organic compound emissions (lbs/ton of sinter) for each operating day using the procedures in §63.7824(e).

§ 63.7831 What are the installation, operation, and maintenance requirements for my monitors?

(a) For each CPMS required in §63.7830, you must develop and make available for inspection upon request by the permitting authority a site-specific monitoring plan that addresses the requirements in paragraphs (a)(1) through (8) of this section.

(1) Installation of the CPMS sampling probe or other interface at a measurement location relative to each affected process unit such that the measurement is representative of control of the exhaust emissions (e.g., on or downstream of the last control device); (2) Performance and equipment specifications for the sample interface, the parametric signal analyzer, and the data collection and reduction system;

(3) Performance evaluation procedures and acceptance criteria (e.g., calibrations);

(4) Ongoing operation and maintenance procedures in accordance with the general requirements of §§63.8(c)(1), (c)(3), (c)(4)(i), (c)(7), and (c)(8);
§ 63.7831  

(5) Ongoing data quality assurance procedures in accordance with the general requirements of § 63.8(d);  

(6) Ongoing recordkeeping and reporting procedures in accordance with the general requirements of §§ 63.10(c), (e)(1), and (e)(2)(i);  

(7) Corrective action procedures you will follow in the event a venturi scrubber exceeds the operating limit in § 63.7790(b)(2); and  

(8) Corrective action procedures you will follow in the event an electrostatic precipitator exceeds the operating limit in § 63.7790(b)(3).  

(b) Unless otherwise specified, each CPMS must:  

(1) Complete a minimum of one cycle of operation for each successive 15-minute period and collect a minimum of three of the required four data points to constitute a valid hour of data;  

(2) Provide valid hourly data for at least 95 percent of every averaging period; and  

(3) Determine and record the hourly average of all recorded readings.  

(c) You must conduct a performance evaluation of each CPMS in accordance with your site-specific monitoring plan.  

(d) You must operate and maintain the CPMS in continuous operation according to the site-specific monitoring plan.  

(e) For each capture system subject to an operating limit in § 63.7790(b)(1), you must install, operate, and maintain each CPMS according to the requirements in paragraphs (a) through (d) of this section.  

(f) For each baghouse equipped with a bag leak detection system according to § 63.7830(b)(1), you must install, operate, and maintain the bag leak detection system according to the requirements in paragraphs (f)(1) through (7) of this section.  

(1) The system must be certified by the manufacturer to be capable of detecting emissions of particulate matter at concentrations of 10 milligrams per actual cubic meter (0.0044 grains per actual cubic foot) or less.  

(2) The system must provide output of relative changes in particulate matter loadings.  

(3) The system must be equipped with an alarm that will sound when an increase in relative particulate loadings is detected over a preset level. The alarm must be located such that it can be heard by the appropriate plant personnel.  

(4) Each system that works based on the triboelectric effect must be installed, operated, and maintained in a manner consistent with the guidance document, “Fabric Filter Bag Leak Detection Guidance,” EPA–454/R–98–015, September 1997. You may install, operate, and maintain other types of bag leak detection systems in a manner consistent with the manufacturer’s written specifications and recommendations.  

(5) To make the initial adjustment of the system, establish the baseline output by adjusting the sensitivity (range) and the averaging period of the device. Then, establish the alarm set points and the alarm delay time.  

(6) Following the initial adjustment, do not adjust the sensitivity or range, averaging period, alarm set points, or alarm delay time, except as detailed in your operation and maintenance plan. Do not increase the sensitivity by more than 100 percent or decrease the sensitivity by more than 50 percent over a 365-day period unless a responsible official certifies, in writing, that the baghouse has been inspected and found to be in good operating condition.  

(7) Where multiple detectors are required, the system’s instrumentation and alarm may be shared among detectors.  

(g) For each venturi scrubber subject to operating limits in § 63.7790(b)(2) for pressure drop and scrubber water flow rate, you must install, operate, and maintain each CPMS according to the requirements in paragraphs (a) through (d) of this section.  

(b) For each electrostatic precipitator subject to the opacity operating limit in § 63.7790(b)(3) and each baghouse equipped with a COMS according to § 63.7830(b)(2), you must install, operate, and maintain each COMS according to the requirements in paragraphs (b)(1) through (4) of this section.
(1) You must install, operate, and maintain each COMS according to Performance Specification 1 in 40 CFR part 60, appendix B.

(2) You must conduct a performance evaluation of each COMS according to §63.8 and Performance Specification 1 in appendix B to 40 CFR part 60.

(3) Each COMS must 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.

(4) COMS data must be reduced to 6-minute averages as specified in §63.8(g)(2) and to hourly averages where required by this subpart.

§ 63.7832 How do I monitor and collect data to demonstrate continuous compliance?

(a) Except for monitoring malfunctions, out-of-control periods as specified in §63.8(c)(7), associated repairs, and required quality assurance or control activities (including as applicable, calibration checks and required zero and span adjustments), you must monitor continuously (or collect data at all required intervals) at all times an affected source is operating.

(b) 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 or to fulfill a minimum data availability requirement, if applicable. You must use all the data collected during all other periods in assessing compliance.

(c) A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions.

§ 63.7833 How do I demonstrate continuous compliance with the emission limitations that apply to me?

(a) You must demonstrate continuous compliance for each affected source subject to an emission or opacity limit in §63.7790(a) by meeting the requirements in Table 3 to this subpart.

(b) You must demonstrate continuous compliance for each capture system subject to an operating limit in §63.7790(b)(1) by meeting the requirements in paragraphs (b)(1) and (2) of this section.

(1) Operate the capture system at or above the lowest values or settings established for the operating limits in your operation and maintenance plan; and

(2) Monitor the capture system according to the requirements in §63.7830(a) and collect, reduce, and record the monitoring data for each of the operating limit parameters according to the applicable requirements of this subpart;

(c) For each baghouse applied to meet any particulate emission limit in Table 1 to this subpart, you must demonstrate continuous compliance by meeting the requirements in paragraph (c)(1) or (2) of this section as applicable, and paragraphs (c)(3) and (4) of this section:

(1) For a baghouse equipped with a bag leak detection system, operating and maintaining each bag leak detection system according to §63.7831(f) and recording all information needed to document conformance with these requirements. If you increase or decrease the sensitivity of the bag leak detection system beyond the limits specified in §63.7831(f)(6), you must include a copy of the required written certification by a responsible official in the next semiannual compliance report.

(2) For a baghouse equipped with a COMS, operating and maintaining each COMS and reducing the COMS data according to §63.7831(h).

(3) Inspecting each baghouse according to the requirements in §63.7830(b)(4) and maintaining all records needed to document conformance with these requirements.

(4) Maintaining records of the time you initiated corrective action in the event of a bag leak detection system alarm or when the hourly average opacity exceeded 5 percent, the corrective action(s) taken, and the date on which corrective action was completed.

(d) For each venturi scrubber subject to the operating limits for pressure.
drop and scrubber water flow rate in §63.7790(b)(2), you must demonstrate continuous compliance by meeting the requirements of paragraphs (d)(1) through (4) of this section:

1. Maintaining the hourly average pressure drop and scrubber water flow rate at levels no lower than those established during the initial or subsequent performance test;

2. Operating and maintaining each venturi scrubber CPMS according to §63.7831(g) and recording all information needed to document conformance with these requirements; and

3. Collecting and reducing monitoring data for pressure drop and scrubber water flow rate according to §63.7831(b) and recording all information needed to document conformance with these requirements.

4. If the hourly average pressure drop or scrubber water flow rate is below the operating limits, you must follow the corrective action procedures in paragraph (g) of this section.

(e) For each electrostatic precipitator subject to the opacity operating limit in §63.7790(b)(3), you must demonstrate continuous compliance by meeting the requirements of paragraphs (e)(1) through (3) of this section:

1. Maintaining the hourly average opacity of emissions no higher than 10 percent; and

2. Operating and maintaining each COMS and reducing the COMS data according to §63.7831(h).

3. If the hourly average opacity of emissions exceeds 10 percent, you must follow the corrective action procedures in paragraph (g) of this section.

(f) For each new or existing sinter plant subject to the operating limit in §63.7790(d), you must demonstrate continuous compliance by either:

1. For the sinter plant feedstock oil content operating limit in §63.7790(d)(1),

   (i) Computing and recording the 30-day rolling average of the percent oil content for each operating day according to the performance test procedures in §63.7824(d);

   (ii) Recording the sampling date and time, oil content values, and sinter produced (tons/day); and

   (iii) Maintaining the 30-day rolling average oil content of the feedstock no higher than 0.02 percent.

2. For the volatile organic compound operating limit in §63.7790(d)(2),

   (i) Computing and recording the 30-day rolling average of the volatile organic compound emissions for each operating day according to the performance test procedures in §63.7824(e);

   (ii) Recording the sampling date and time, sampling values, and sinter produced (tons/day); and

   (iii) Maintaining the 30-day rolling average of volatile organic compound emissions no higher than 0.2 lb/ton of sinter produced.

(g) If the hourly average pressure drop or water flow rate for a venturi scrubber or hourly average opacity for an electrostatic precipitator exceeds the operating limit, you must follow the procedures in paragraphs (g)(1) through (4) of this section.

1. You must initiate corrective action to determine the cause of the exceedance within 1 hour. During any period of corrective action, you must continue to monitor and record all required operating parameters for equipment that remains in operation. Within 24 hours of the exceedance, you must measure and record the hourly average operating parameter value for the emission unit on which corrective action was taken. If the hourly average parameter value meets the applicable operating limit, then the corrective action was successful and the emission unit is in compliance with the applicable operating limit.

2. If the initial corrective action required in paragraph (g)(1) of this section was not successful, you must complete additional corrective action within the next 24 hours (48 hours from the time of the exceedance). During any period of corrective action, you must continue to monitor and record all required operating parameters for equipment that remains in operation. After this second 24-hour period, you must again measure and record the hourly average operating parameter value for the emission unit on which corrective action was taken. If the hourly average parameter value meets the applicable operating limit, then the corrective action was successful and the emission unit is in compliance with the applicable operating limit.
Environmental Protection Agency

§ 63.7835

What other requirements must I meet to demonstrate continuous compliance?

(a) Deviations. Except as provided in §63.7833(g), you must report each instance in which you did not meet each emission limitation in §63.7790 that applies to you. This includes periods of startup, shutdown, and malfunction. You also must report each instance in which you did not meet each operation and maintenance requirement in §63.7800 that applies to you. These instances are deviations from the emission limitations and operation and maintenance requirements in this subpart. These deviations must be reported according to the requirements in §63.7841.

(b) Startups, shutdowns, and malfunctions. (1) Consistent with §§63.6(e) and 63.7(e)(1), deviations that occur during a period of startup, shutdown, or malfunction are not violations if you demonstrate to the Administrator’s satisfaction that you were operating in accordance with §63.6(e)(1).

(2) The Administrator will determine whether deviations that occur during a period of startup, shutdown, or malfunction are violations, according to the provisions in §63.6(e).

§ 63.7840 What notifications must I submit and when?

(a) You must submit all of the notifications in §§63.6(h)(4) and (5), 63.7(b) and (c), 63.8(e) and (f)(4), and 63.9(b) through (h) that apply to you by the specified dates.

(b) As specified in §63.9(b)(2), if you startup your affected source before May 20, 2003, you must submit your initial notification no later than September 17, 2003.

(c) As specified in §63.9(b)(3), if you start your new affected source on or after May 20, 2003, you must submit your initial notification no later than 120 calendar days after you become subject to this subpart.

(d) If you are required to conduct a performance test, you must submit a notification of intent to conduct a performance test at least 60 calendar days before the performance test is scheduled to begin as required in §63.7(b)(1).

(e) If you are required to conduct a performance test, opacity observation, or other initial compliance demonstration, you must submit a notification of compliance status according to §63.9(h)(2)(ii).

1. For each initial compliance demonstration that does not include a performance test, you must submit the notification of compliance status before the close of business on the 30th calendar day following completion of the initial compliance demonstration.

2. For each initial compliance demonstration that does include a performance test, you must submit the notification of compliance status, including the performance test results, before the close of business on the 60th calendar day following the completion of the performance test according to §63.10(d)(2).

§ 63.7841 What reports must I submit and when?

(a) Compliance report due dates. Unless the Administrator has approved a different schedule, you must submit a semiannual compliance report to your permitting authority according to the requirements in paragraphs (a)(1) through (5) of this section.

1. The first compliance report must cover the period beginning on the compliance date that is specified for your affected source in §63.7783 and ending on June 30 or December 31, whichever date comes first after the compliance date that is specified for your source in §63.7783.

2. The first compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date comes first after your first compliance report is due.

3. 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. Each subsequent compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date comes first after the end of the semiannual reporting period.

5. For each affected source 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 (a)(1) through (4) of this section.

3. Compliance report contents. Each compliance report must include the information in paragraphs (b)(1) through (3) of this section and, as applicable, paragraphs (b)(4) through (8) of this section.

1. Company name and address.

2. Statement by a responsible official, with that official’s name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report.

3. Date of report and beginning and ending dates of the reporting period.

4. If you had a startup, shutdown, or malfunction during the reporting period and you took actions consistent with your startup, shutdown, and malfunction plan, the compliance report must include the information in §63.10(d)(5)(i).
(5) If there were no deviations from the continuous compliance requirements in §§63.7833 and 63.7834 that apply to you, a statement that there were no deviations from the emission limitations or operation and maintenance requirements during the reporting period.

(6) If there were no periods during which a continuous monitoring system (including a CPMS, COMS, or continuous emission monitoring system (CEMS) was out-of-control as specified in §63.8(c)(7), a statement that there were no periods during which the CPMS was out-of-control during the reporting period.

(7) For each deviation from an emission limitation in §63.7790 that occurs at an affected source where you are not using a continuous monitoring system (including a CPMS, COMS, or CEMS) to comply with an emission limitation in this subpart, the compliance report must contain the information in paragraphs (b)(1) through (4) of this section and the information in paragraphs (b)(7)(i) and (ii) of this section. This includes periods of startup, shutdown, and malfunction.

(i) The total operating time of each affected source during the reporting period.

(ii) Information on the number, duration, and cause of deviations (including unknown cause, if applicable) as applicable and the corrective action taken.

(8) For each deviation from an emission limitation occurring at an affected source where you are using a continuous monitoring system (including a CPMS or COMS) to comply with the emission limitation in this subpart, you must include the information in paragraphs (b)(1) through (4) of this section and the information in paragraphs (b)(8)(i) through (xi) of this section. This includes periods of startup, shutdown, and malfunction.

(i) The date and time that each malfunction started and stopped.

(ii) The date and time that each continuous monitoring was inoperative, except for zero (low-level) and high-level checks.

(iii) The date, time, and duration that each continuous monitoring system was out-of-control as specified in §63.8(c)(7), including the information in §63.8(c)(8).

(iv) The date and time that each deviation started and stopped, and whether each deviation occurred during a period of startup, shutdown, or malfunction or during another period.

(v) 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.

(vi) A breakdown of the total duration of the deviations during the reporting period including those that are due to startup, shutdown, control equipment problems, process problems, other known causes, and other unknown causes.

(vii) A summary of the total duration of continuous monitoring system downtime during the reporting period and the total duration of continuous monitoring system downtime as a percent of the total source operating time during the reporting period.

(viii) A brief description of the process units.

(ix) A brief description of the continuous monitoring system.

(x) The date of the latest continuous monitoring system certification or audit.

(xi) A description of any changes in continuous monitoring systems, processes, or controls since the last reporting period.

(c) Immediate startup, shutdown, and malfunction report. If you had a startup, shutdown, or malfunction during the semiannual reporting period that was not consistent with your startup, shutdown, and malfunction plan, you must submit an immediate startup, shutdown, and malfunction report according to the requirements in §63.10(d)(5)(ii).

(d) Part 70 monitoring report. If you have obtained a title V operating permit for an affected source pursuant to 40 CFR part 70 or 71, you 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 you submit a compliance report for an affected source along with, or as part of, the semiannual monitoring report required by 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR
§ 63.7843 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 on site for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record according to §63.10(b)(1). You can keep the records offsite for the remaining 3 years.

OTHER REQUIREMENTS AND INFORMATION

§ 63.7850 What parts of the General Provisions apply to me?

Table 4 to this subpart shows which parts of the General Provisions in §§63.1 through 63.15 apply to you.

§ 63.7851 Who implements and enforces this subpart?

(a) This subpart can be implemented and enforced by us, the United States Environmental Protection Agency (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 has the authority to implement and enforce this subpart. You should contact your U.S. 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 Subpart E of this part, 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 specified in paragraphs (c)(1) through (4) of this section.

(1) Approval of alternative opacity emission limits in Table 1 to this subpart under §63.6(h)(9).
§ 63.7852 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.

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 upset conditions. A bag leak detection system includes, but is not limited to, an instrument that operates on triboelectric, light scattering, light transmittance, or other effect to continuously monitor relative particulate matter loadings.

Basic oxygen process furnace means any refractory-lined vessel in which high-purity oxygen is blown under pressure through a bath of molten iron, scrap metal, and fluxes to produce steel. This definition includes both top and bottom blown furnaces, but does not include argon oxygen decarburization furnaces.

Basic oxygen process furnace shop means the place where steelmaking operations that begin with the transfer of molten iron (hot metal) from the torpedo car and end prior to casting the molten steel, including hot metal transfer, desulfurization, slag skimming, refining in a basic oxygen process furnace, and ladle metallurgy occur.

Basic oxygen process furnace shop ancillary operations means the processes where hot metal transfer, hot metal desulfurization, slag skimming, and ladle metallurgy occur.

Blast furnace means a furnace used for the production of molten iron from iron ore and other iron bearing materials.

Bottom-blown furnace means any basic oxygen process furnace in which oxygen and other combustion gases are introduced into the bath of molten iron through tuyeres in the bottom of the vessel or through tuyeres in the bottom and sides of the vessel.

Custhouse means the building or structure that encloses the bottom portion of a blast furnace where the hot metal and slag are tapped from the furnace.

Certified observer means a visible emission observer certified to perform EPA Method 9 opacity observations.

Desulfurization means the process in which reagents such as magnesium, soda ash, and lime are injected into the hot metal, usually with dry air or nitrogen, to remove sulfur.

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 (including operating limits) or operation and maintenance requirement;

(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 in this subpart during startup, shutdown, or malfunction, regardless of whether or not such failure is permitted by this subpart.

Discharge end means the place where those operations conducted within the sinter plant starting at the discharge of the sintering machine’s traveling grate including (but not limited to) hot sinter crushing, screening, and transfer operations occur.

Emission limitation means any emission limit, opacity limit, or operating limit.

Hot metal transfer station means the location in a basic oxygen process furnace shop where molten iron (hot metal) is transferred from a torpedo
car or hot metal car used to transport hot metal from the blast furnace casthouse to a holding vessel or ladle in the basic oxygen process furnace shop. This location also is known as the reladling station or ladle transfer station.

Integrated iron and steel manufacturing facility means an establishment engaged in the production of steel from iron ore.

Ladle metallurgy means a secondary steelmaking process that is performed typically in a ladle after initial refining in a basic oxygen process furnace to adjust or amend the chemical and/or mechanical properties of steel. This definition does not include vacuum degassing.

Primary emissions means particulate matter emissions from the basic oxygen process furnace generated during the steel production cycle which are captured and treated in the furnace’s primary emission control system.

Primary emission control system means the combination of equipment used for the capture and collection of primary emissions (e.g., an open hood capture system used in conjunction with an electrostatic precipitator or a closed hood system used in conjunction with a scrubber).

Primary oxygen blow means the period in the steel production cycle of a basic oxygen process furnace during which oxygen is blown through the molten iron bath by means of a lance inserted from the top of the vessel (top-blown) or through tuyeres in the bottom and/or sides of the vessel (bottom-blown).

Responsible official means responsible official as defined in §63.2.

Secondary emissions means particulate matter emissions that are not controlled by a primary emission control system, including emissions that escape from open and closed hoods, lance hole openings, and gaps or tears in ductwork to the primary emission control system.

Secondary emission control system means the combination of equipment used for the capture and collection of secondary emissions from a basic oxygen process furnace.

Sinter cooler means the apparatus used to cool the hot sinter product that is transferred from the discharge end through contact with large volumes of induced or forced draft air.

Sinter plant means the machine used to produce a fused clinker-like aggregate or sinter of fine iron-bearing materials suited for use in a blast furnace. The machine is composed of a continuous traveling grate that conveys a bed of ore fines and other finely divided iron-bearing material and fuel (typically coke breeze), a burner at the feed end of the grate for ignition, and a series of downdraft windboxes along the length of the strand to support downdraft combustion and heat sufficient to produce a fused sinter product.

Skimming station means the locations inside a basic oxygen process furnace shop where slag is removed from the top of the molten metal bath.

Steel production cycle means the operations conducted within the basic oxygen process furnace shop that are required to produce each batch of steel. The following operations are included: scrap charging, preheating (when done), hot metal charging, primary oxygen blowing, sampling, (vessel turn-down and turnup), additional oxygen blowing (when done), tapping, and deslagging. The steel production cycle begins when the scrap is charged to the furnace and ends after the slag is emptied from the vessel into the slag pot.

Top-blown furnace means any basic oxygen process furnace in which oxygen is introduced into the bath of molten iron by means of an oxygen lance inserted from the top of the vessel.

Windboxes means the compartments that provide for a controlled distribution of downdraft combustion air as it is drawn through the sinter bed of a sinter plant to make the fused sinter product.

## TABLE 1 TO SUBPART FFFFF OF PART 63—Emission and Opacity Limits

As required in §63.7790(a), you must comply with each applicable emission and opacity limit in the following table:

<table>
<thead>
<tr>
<th>For . . .</th>
<th>You must comply with each of the following . . .</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Each windbox exhaust stream at an existing sinter plant</td>
<td>You must not cause to be discharged to the atmosphere any gases that contain particulate matter in excess of 0.4 lb/ton of product sinter.</td>
</tr>
<tr>
<td>2. Each windbox exhaust stream at a new sinter plant</td>
<td>You must not cause to be discharged to the atmosphere any gases that contain particulate matter in excess of 0.3 lb/ton of product sinter.</td>
</tr>
</tbody>
</table>
| 3. Each discharge end at an existing sinter plant | a. You must not cause to be discharged to the atmosphere any gases that exit from one or more control devices that contain, on a flow-weighted basis, particulate matter in excess of 0.02 gr/dscf; and  
b. You must not cause to be discharged to the atmosphere any secondary emissions that exit any opening in the building or structure housing the discharge end that exhibit opacity greater than 20 percent (6-minute average). |
| 4. Each discharge end at a new sinter plant | a. You must not cause to be discharged to the atmosphere any gases that exit from one or more control devices that contain, on a flow-weighted basis, particulate matter in excess of 0.01 gr/dscf; and  
b. You must not cause to be discharged to the atmosphere any secondary emissions that exit any opening in the building or structure housing the discharge end that exhibit opacity greater than 10 percent (6-minute average). |
| 5. Each sinter cooler at an existing sinter plant | You must not cause to be discharged to the atmosphere any emissions that exhibit opacity greater than 10 percent (6-minute average). |
| 6. Each sinter cooler at a new sinter plant | You must not cause to be discharged to the atmosphere any gases that contain particulate matter in excess of 0.01 gr/dscf. |
| 7. Each casthouse at an existing blast furnace | a. You must not cause to be discharged to the atmosphere any gases that exit from a control device that contain particulate matter in excess of 0.01 gr/dscf; and  
b. You must not cause to be discharged to the atmosphere any secondary emissions that exit any opening in the casthouse or structure housing the blast furnace that exhibit opacity greater than 20 percent (6-minute average). |
| 8. Each casthouse at a new blast furnace | a. You must not cause to be discharged to the atmosphere any gases that exit from a control device that contain particulate matter in excess of 0.03 gr/dscf during the primary oxygen blow; and  
b. You must not cause to be discharged to the atmosphere any secondary emissions that exit any opening in the casthouse or structure housing the blast furnace that exhibit opacity greater than 15 percent (6-minute average). |
| 9. Each BOPF at a new or existing shop | a. You must not cause to be discharged to the atmosphere any gases that exit from a primary emission control system for a BOPF with a closed hood system at a new or existing BOPF shop that contain, on a flow-weighted basis, particulate matter in excess of 0.02 gr/dscf during the steel production cycle for an existing BOPF shop or 0.01 gr/dscf during the steel production cycle for a new BOPF shop; and  
c. You must not cause to be discharged to the atmosphere any gases that exit from a control device used solely for the collection of secondary emissions from the BOPF that contain particulate matter in excess of 0.01 gr/dscf for an existing BOPF shop or 0.0052 gr/dscf for a new BOPF shop. |
<p>| 10. Each hot metal transfer, skimming, and desulfurization operation at a new or existing BOPF shop | You must not cause to be discharged to the atmosphere any gases that exit from a control device that contain particulate matter in excess of 0.01 gr/dscf for an existing BOPF shop or 0.003 gr/dscf for a new BOPF shop. |
| 11. Each ladle metallurgy operation at a new or existing BOPF shop | You must not cause to be discharged to the atmosphere any gases that exit from a control device that contain particulate matter in excess of 0.01 gr/dscf for an existing BOPF shop or 0.004 gr/dscf for a new BOPF shop. |</p>
<table>
<thead>
<tr>
<th>For . . .</th>
<th>You have demonstrated initial compliance if . . .</th>
</tr>
</thead>
<tbody>
<tr>
<td>12. Each roof monitoring at an existing BOPF shop</td>
<td>You must comply with each of the following . . .</td>
</tr>
<tr>
<td>13. Each roof monitor at a new BOPF shop</td>
<td>a. You must not cause to be discharged to the atmosphere any secondary emissions that exit any opening in the BOPF shop or other building housing a bottom-blown BOPF or BOPF shop operations that exhibit opacity (for any set of 6-minute averages) greater than 10 percent, except that one 6-minute period not to exceed 20 percent may occur once per steel production cycle; or</td>
</tr>
<tr>
<td></td>
<td>b. You must not cause to be discharged to the atmosphere any secondary emissions that exit any opening in the BOPF shop or other building housing a top-blown BOPF or BOPF shop operations that exhibit opacity (for any set of 3-minute averages) greater than 10 percent, except that one 3-minute period greater than 10 percent but less than 20 percent may occur once per steel production cycle.</td>
</tr>
</tbody>
</table>

1 This limit applies if the cooler is vented to the same control device as the discharge end.
2 This concentration limit (gr/dscf) for a control device does not apply to discharges inside a building or structure housing the discharge end at an existing sinter plant, inside a casthouse at an existing blast furnace, or inside an existing BOPF shop if the control device was installed before August 30, 2005.
3 This limit applies to control devices operated in parallel for a single BOPF during the oxygen blow.

Table 2 to Subpart FFFFE of Part 63—Initial Compliance With Emission and Opacity Limits

As required in §63.7825(a)(1), you must demonstrate initial compliance with the emission and opacity limits according to the following table:

<table>
<thead>
<tr>
<th>For . . .</th>
<th>You have demonstrated initial compliance if . . .</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Each windbox exhaust stream at an existing sinter plant</td>
<td>The process-weighted mass rate of particulate matter from a windbox exhaust stream, measured according to the performance test procedures in §63.7822(c), did not exceed 0.4 lb/ton of product sinter.</td>
</tr>
<tr>
<td>2. Each windbox exhaust stream at a new sinter plant</td>
<td>The process-weighted mass rate of particulate matter from a windbox exhaust stream, measured according to the performance test procedures in §63.7822(c), did not exceed 0.3 lb/ton of product sinter.</td>
</tr>
<tr>
<td>3. Each discharge end at an existing sinter plant</td>
<td>a. The flow-weighted average concentration of particulate matter from one or more control devices applied to emissions from a discharge end, measured according to the performance test procedures in §63.7823(d), did not exceed 0.02 gr/dscf; and</td>
</tr>
<tr>
<td></td>
<td>b. The opacity of secondary emissions from each discharge end, determined according to the performance test procedures in §63.7823(c), did not exceed 10 percent (6-minute average).</td>
</tr>
<tr>
<td>4. Each discharge end at a new sinter plant</td>
<td>a. The flow-weighted average concentration of particulate matter from one or more control devices applied to emissions from a discharge end, measured according to the performance test procedures in §63.7823(d), did not exceed 0.01 gr/dscf; and</td>
</tr>
<tr>
<td></td>
<td>b. The opacity of secondary emissions from each discharge end, determined according to the performance test procedures in §63.7823(c), did not exceed 10 percent (6-minute average).</td>
</tr>
<tr>
<td>5. Each sinter cooler at an existing sinter plant</td>
<td>The opacity of emissions, determined according to the performance test procedures in §63.7823(e), did not exceed 10 percent (6-minute average).</td>
</tr>
<tr>
<td>6. Each sinter cooler at a new sinter plant</td>
<td>The average concentration of particulate matter, measured according to the performance test procedures in §63.7822(b), did not exceed 0.01 gr/dscf.</td>
</tr>
<tr>
<td>7. Each casthouse at an existing blast furnace</td>
<td>a. The average concentration of particulate matter from a control device applied to emissions from a casthouse, measured according to the performance test procedures in §63.7822(b), did not exceed 0.01 gr/dscf; and</td>
</tr>
</tbody>
</table>
Table 3 to Subpart FFF of Part 63—Continuous Compliance With Emission and Opacity Limits

As required in §63.7833(a), you must demonstrate continuous compliance with the emission and opacity limits according to the following table:

<table>
<thead>
<tr>
<th>For . . .</th>
<th>You must demonstrate continuous compliance by . . .</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Each windbox exhaust stream at an existing sinter plant</td>
<td>a. Maintaining emissions of particulate matter at or below 0.4 lb/ton of product sinter; and</td>
</tr>
<tr>
<td>For . . .</td>
<td>You must demonstrate continuous compliance by . . .</td>
</tr>
<tr>
<td>---------</td>
<td>--------------------------------------------------</td>
</tr>
</tbody>
</table>
| 2. Each windbox exhaust stream at a new sinter plant | b. Conducting subsequent performance tests at the frequencies specified in §63.7821.  
   a. Maintaining emissions of particulate matter at or below 0.3 lb/ton of product sinter; and |
| 3. Each discharge end at an existing sinter plant | a. Maintaining emissions of particulate matter from one or more control devices at or below 0.02 gr/dscf; and  
   b. Maintaining the opacity of secondary emissions that exit any opening in the building or structure housing the discharge end at or below 20 percent (6-minute average); and  
   c. Conducting subsequent performance tests at the frequencies specified in §63.7821. |
| 4. Each discharge end at a new sinter plant | a. Maintaining emissions of particulate matter from one or more control devices at or below 0.01 gr/dscf; and  
   b. Maintaining the opacity of secondary emissions that exit any opening in the building or structure housing the discharge end at or below 10 percent (6-minute average); and  
   c. Conducting subsequent performance tests at the frequencies specified in §63.7821. |
| 5. Each sinter cooler at an existing sinter plant | a. Maintaining the opacity of emissions that exit any sinter cooler at or below 10 percent (6-minute average); and  
   b. Conducting subsequent performance tests at the frequencies specified in §63.7821. |
| 6. Each sinter cooler at a new sinter plant | a. Maintaining emissions of particulate matter at or below 0.1 gr/dscf; and  
   b. Conducting subsequent performance tests at the frequencies specified in §63.7821. |
| 7. Each casthouse at an existing blast furnace | a. Maintaining emissions of particulate matter from a control device at or below 0.01 gr/dscf; and  
   b. Maintaining the opacity of secondary emissions that exit any opening in the casthouse or structure housing the casthouse at or below 20 percent (6-minute average); and  
   c. Conducting subsequent performance tests at the frequencies specified in §63.7821. |
| 8. Each casthouse at a new blast furnace | a. Maintaining emissions of particulate matter from a control device at or below 0.003 gr/dscf; and  
   b. Maintaining the opacity of secondary emissions that exit any opening in the casthouse or structure housing the casthouse at or below 15 percent (6-minute average); and  
   c. Conducting subsequent performance tests at the frequencies specified in §63.7821. |
| 9. Each BOPF at a new or existing BOPF shop | a. Maintaining emissions of particulate matter from the primary control system for a BOPF with a closed hood system at or below 0.03 gr/dscf; and  
   b. Maintaining emissions of particulate matter from the primary control system for a BOPF with an open hood system at or below 0.02 gr/dscf; and  
   c. Maintaining emissions of particulate matter from a control device applied solely to secondary emissions from a BOPF at or below 0.01 gr/dscf for an existing BOPF shop or 0.0052 gr/dscf for a new BOPF shop; and  
   d. Conducting subsequent performance tests at the frequencies specified in §63.7821. |
| 10. Each hot metal transfer, skimming, and desulfurization operation at a new or existing BOPF shop. | a. Maintaining emissions of particulate matter from a control device at or below 0.01 gr/dscf at an existing BOPF or 0.003 gr/dscf for a new BOPF; and  
   b. Conducting subsequent performance tests at the frequencies specified in §63.7821. |
| 11. Each ladle metallurgy operation at a new or existing BOPF shop. | a. Maintaining emissions of particulate matter from a control device at or below 0.01 gr/dscf at an existing BOPF shop or 0.004 gr/dscf for a new BOPF shop; and  
   b. Conducting subsequent performance tests at the frequencies specified in §63.7821. |
| 12. Each roof monitor at an existing BOPF shop. | a. Maintaining the opacity of secondary emissions that exit any opening in the BOPF shop or other building housing the BOPF shop or shop operation at or below 20 percent (3-minute average); and  
   b. Conducting subsequent performance tests at the frequencies specified in §63.7821. |
For . . . You must demonstrate continuous compliance by . . .

13. Each roof monitor at a new BOPF shop

a. Maintaining the opacity (for any set of 6-minute averages) of secondary emissions that exit any opening in the BOPF shop or other building housing a bottom-blown BOPF shop operation at or below 10 percent, except that one 6-minute period greater than 10 percent but no more than 20 percent may occur once per steel production cycle; and
b. Maintaining the opacity (for any set of 3-minute averages) of secondary emissions that exit any opening in the BOPF shop or other building housing a top-blown BOPF shop operation at or below 10 percent, except that one 3-minute period greater than 10 percent but less than 20 percent may occur once per steel production cycle; and
c. Conducting subsequent performance tests at the frequencies specified in § 63.7821.

[71 FR 39590, July 13, 2006]

**TABLE 4 TO SUBPART FFFFF OF PART 63—APPLICABILITY OF GENERAL PROVISIONS TO SUBPART FFFFF**

As required in §63.7850, you must comply with the requirements of the NESHAP General Provisions (40 CFR part 63, subpart A) shown in the following table:

<table>
<thead>
<tr>
<th>Citation</th>
<th>Subject</th>
<th>Applies to Subpart FFFFF</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>§63.1</td>
<td>Applicability</td>
<td>Yes.</td>
<td></td>
</tr>
<tr>
<td>§63.2</td>
<td>Definitions</td>
<td>Yes.</td>
<td></td>
</tr>
<tr>
<td>§63.3</td>
<td>Units and Abbreviations</td>
<td>Yes.</td>
<td></td>
</tr>
<tr>
<td>§63.4</td>
<td>Prohibited Activities</td>
<td>Yes.</td>
<td></td>
</tr>
<tr>
<td>§63.5</td>
<td>Construction/Reconstruction</td>
<td>Yes.</td>
<td></td>
</tr>
<tr>
<td>§63.6(a), (b), (c), (d), (e), (f), (g), (h)(2)(i)–(h)(9), (h)(2)(j)</td>
<td>Compliance with Standards and Maintenance Requirements</td>
<td>Yes.</td>
<td></td>
</tr>
<tr>
<td>§63.6(h)(2)(j)</td>
<td>Determining Compliance with Opacity and VE Standards</td>
<td>No</td>
<td>Subpart FFFFF specifies methods and procedures for determining compliance with opacity emission and operating limits.</td>
</tr>
<tr>
<td>§63.6(i)</td>
<td>Extension of Compliance with Emission Standards</td>
<td>Yes.</td>
<td></td>
</tr>
<tr>
<td>§63.6(j)</td>
<td>Exemption from Compliance with Emission Standards</td>
<td>Yes.</td>
<td></td>
</tr>
<tr>
<td>§63.7(a)(1)–(2)</td>
<td>Applicability and Performance Test Dates</td>
<td>No.</td>
<td>Subpart FFFFF and specifies performance test applicability and dates.</td>
</tr>
<tr>
<td>§63.7(a)(3), (b), (c)–(h)</td>
<td>Performance Testing Requirements</td>
<td>Yes.</td>
<td></td>
</tr>
<tr>
<td>§63.8(a)(1)–(3), (b), (c)(1)–(3), (c)(4)(i)–(ii), (c)(5)–(6), (c)(7)–(8), (h)(1)–(5), (g)(1)–(4)</td>
<td>Monitoring Requirements</td>
<td>Yes.</td>
<td>CMS requirements in §§63.8(c)(4)(i)–(ii), (c)(5)–(6), (d), and (e) apply only to COMS.</td>
</tr>
<tr>
<td>§63.8(a)(4)</td>
<td>Additional Monitoring Requirements for Control Devices in §63.11</td>
<td>No.</td>
<td>Subpart FFFFF does not require flares.</td>
</tr>
<tr>
<td>§63.8(c)(4)</td>
<td>Continuous Monitoring System Requirements</td>
<td>No.</td>
<td>Subpart FFFFF specifies requirements for operation of CMS.</td>
</tr>
<tr>
<td>§63.8(f)(6)</td>
<td>RATA Alternative</td>
<td>No.</td>
<td>Subpart FFFFF specifies data reduction requirements.</td>
</tr>
<tr>
<td>§63.8(g)(5)</td>
<td>Data Reduction</td>
<td>No.</td>
<td>Subpart FFFFF specifies data reduction requirements.</td>
</tr>
<tr>
<td>§63.9</td>
<td>Notification Requirements</td>
<td>Yes.</td>
<td>Additional notifications for CMS in §63.9(g) apply only to COMS.</td>
</tr>
<tr>
<td>§63.10(a), (b)(1), (b)(2)(i)–(ii), (b)(2)(iv), (b)(3), (c)(1)–(6), (c)(9)–(15), (d), (e)(1)–(2), (e)(4), (f)</td>
<td>Recordkeeping and Reporting Requirements</td>
<td>Yes.</td>
<td>Additional records for CMS in §63.10(c)(1)–(6), (9)–(15), and reports in §63.10(d)(1)–(2) apply only to COMS.</td>
</tr>
<tr>
<td>§63.10(b)(2)(xii)</td>
<td>CMS Records for RATA Alternative</td>
<td>No.</td>
<td>Subpart FFFFF specifies record requirements.</td>
</tr>
<tr>
<td>§63.10(c)(7)–(8)</td>
<td>Records of Excess Emissions and Parameter Monitoring Exceedances for CMS</td>
<td>No.</td>
<td>Subpart FFFFF specifies record requirements.</td>
</tr>
<tr>
<td>§63.10(e)(3)</td>
<td>Excess Emission Reports</td>
<td>No.</td>
<td>Subpart FFFFF specifies reporting requirements.</td>
</tr>
<tr>
<td>§63.11</td>
<td>Control Device Requirements</td>
<td>No.</td>
<td>Subpart FFFFF does not require flares.</td>
</tr>
</tbody>
</table>

[277]
§ 63.7880 What is the purpose of this subpart?

This subpart establishes national emissions limitations and work practice standards for hazardous air pollutants (HAP) emitted from site remediation activities. This subpart also establishes requirements to demonstrate initial and continuous compliance with the emissions limitations and work practice standards.

§ 63.7881 Am I subject to this subpart?

(a) This subpart applies to you if you own or operate a facility at which you conduct a site remediation, as defined in §63.7957; and this site remediation, unless exempted under paragraph (b) or (c) of this section, meets all three of the following conditions specified in paragraphs (a)(1) through (3) of this section.

(1) Your site remediation cleans up a remediation material, as defined in §63.7957.

(2) Your site remediation is co-located at your facility with one or more other stationary sources that emit HAP and meet an affected source definition specified for a source category that is regulated by another subpart under 40 CFR part 63. This condition applies regardless whether or not the affected stationary source(s) at your facility is subject to the standards under the applicable subpart(s).

(3) Your facility is a major source of HAP as defined in §63.2, except as specified in paragraph (a)(3)(i) or (ii) of this section. A major source emits or has the potential to emit any single HAP at the 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.

(1) For production field facilities, as defined in §63.761, only the HAP emissions from the glycol dehydration units and storage vessels with the potential for flash emissions (both as defined in §63.761) shall be aggregated with the HAP emissions from the site remediation activities at the facility for a major source determination.

(ii) For natural gas transmission and storage facilities, HAP emissions shall be aggregated in accordance with the definition of major source in §63.1271 for a major source determination.

(b) You are not subject to this subpart if your site remediation qualifies for any of one of the exemptions listed in paragraphs (b)(1) through (6) of this section.

(1) Your site remediation is not subject to this subpart if the site remediation only cleans up material that does not contain any of the HAP listed in Table 1 of this subpart.

(2) Your site remediation is not subject to this subpart if your site remediation is performed under the authority of the Comprehensive Environmental Response and Compensation Liability Act (CERCLA) as a remedial action or a non time-critical removal action.

(3) Your site remediation is not subject to this subpart if the site remediation will be performed under a Resource Conservation and Recovery Act (RCRA) corrective action conducted at a treatment, storage and disposal facility (TSDF) that is either required by your permit issued by either the U.S. Environmental Protection Agency (EPA) or a State program authorized by the EPA under RCRA section 3006;
required by orders authorized under RCRA; or required by orders authorized under RCRA section 7003.

(4) Your site remediation is not subject to this subpart if the site remediation is conducted at a gasoline service station to clean up remediation material from a leaking underground storage tank.

(5) Your site remediation is not subject to this subpart if the site remediation is conducted at a farm or residential site.

(6) Your site remediation is not subject to this subpart if the site remediation is conducted at a research and development facility that meets the requirements under Clean Air Act (CAA) section 112(c)(7).

(c) Your site remediation activities are not subject to the requirements of this subpart, except for the recordkeeping requirements in this paragraph, provided that you meet the requirements specified in paragraphs (c)(1) through (c)(3) of this section.

(1) You determine that the total quantity of the HAP listed in Table 1 to this subpart that is contained in the remediation material excavated, extracted, pumped, or otherwise removed during all of the site remediations conducted at your facility is less than 1 megagram (Mg) annually. This exemption applies the 1 Mg limit on a facility-wide, annual basis, and there is no restriction to the number of site remediations that can be conducted during this period.

(2) You must prepare and maintain at your facility written documentation to support your determination that the total HAP content of the remediation material.

(3) Your Title V permit does not have to be reopened or revised solely to include the recordkeeping requirement specified in paragraph (c)(2) of this section. However, the requirement must be included in your permit the next time the permit is renewed, reopened, or revised for another reason.

(d) Your site remediation is not subject to the requirements of this subpart if all remediation activities at your facility subject to this subpart are completed and you have notified the Administrator in writing that all remediation activities subject to this subpart are completed. You must maintain records of compliance, in accordance with §63.7953, for each remediation activity that was subject to this subpart. All future remediation activity meeting the applicability criteria in this section must comply with the requirements of this subpart.

§ 63.7882 What site remediation sources at my facility does this subpart affect?

(a) This subpart applies to each new, reconstructed, or existing affected source for your site remediation as designated by paragraphs (a)(1) through (3) of this section.

(1) Process vents. The affected source is the entire group of process vents associated with the in-situ and ex-situ remediation processes used at your site to remove, destroy, degrade, transform, or immobilize hazardous substances in the remediation material subject to remediation. Examples of such in-situ remediation processes include, but are not limited to, soil vapor extraction and bioremediation processes. Examples of such ex-situ remediation processes include, but are not limited to, thermal desorption, bioremediation, and air stripping processes.

(2) Remediation material management units. Remediation material management unit means a tank, surface impoundment, container, oil-water separator, organic-water separator, or transfer system, as defined in §63.7957, and is used at your site to manage remediation material. The affected source is the entire group of remediation material management units used for the site remediations at your site. For the purpose of this subpart, a tank or container that is also equipped with a vent that serves as a process vent, as defined in §63.7957, is not a remediation material management unit, but instead this unit is considered to be a process vent affected source under paragraph (a)(1) of this section.
§ 63.7883 When do I have to comply with this subpart?

(a) If you have an existing affected source, you must comply with each emission limitation, work practice standard, and operation and maintenance requirement in this subpart that applies to you no later than October 9, 2006.

(b) If you have a new affected source that manages remediation material other than a radioactive mixed waste as defined in §63.7957, then you must meet the compliance date specified in paragraph (b)(1) or (2) of this section, as applicable to your affected source.

1 If the affected source’s initial startup date is on or before October 8, 2003, you must comply with each emission limitation, work practice standard, and operation and maintenance requirement in this subpart that applies to you upon initial startup.

2 If the affected source’s initial startup date is after October 8, 2003, you must comply with each emission limitation, work practice standard, and operation and maintenance requirement in this subpart that applies to you upon initial startup.

(c) If you have a new affected source that manages remediation material that is a radioactive mixed waste as defined in §63.7957, then you must meet the compliance date specified in paragraph (c)(1) or (2) of this section, as applicable to your affected source.

1 If the affected source’s initial startup date is on or before October 8, 2003, you must comply with each emission limitation, work practice standard, and operation and maintenance requirement in this subpart that applies to you upon initial startup.

2 If the affected source’s initial startup date is after October 8, 2003, you must comply with each emission limitation, work practice standard, and operation and maintenance requirement in this subpart that applies to you upon initial startup.

(d) If your facility is an area source that increases its emissions or its potential to emit such that it becomes a major source of HAP as defined in §63.2, then you must meet the compliance dates specified in paragraphs (d)(1) and (2) of this section.

1 For each source at your facility that is a new affected source subject to this subpart, you must comply with each emission limitation, work practice standard, and operation and maintenance requirement in this subpart that applies to you upon initial startup.

2 For all other affected sources subject to this subpart, you must comply with each emission limitation, work practice standard, and operation and maintenance requirement in this subpart that applies to you no later than 3 years after your facility becomes a major source.

(e) You must meet the notification requirements, according to the schedule applicable to your facility, as specified in §63.7950 and in 40 CFR part 63, subpart A. Some of the notifications must be submitted before you are required to comply with the emissions limitations and work practice standards in this subpart.
§ 63.7884 What are the general standards I must meet for each site remediation with affected sources?

(a) For each site remediation with an affected source designated under §63.7882, you must meet the standards specified in §§63.7885 through 63.7955, as applicable to your affected source, unless your site remediation meets the requirements for an exemption under paragraph (b) of this section.

(b) A site remediation that is completed within 30 consecutive calendar days according to the conditions in paragraphs (b)(1) through (3) of this section is not subject to the standards under paragraph (a) of this section. This exemption cannot be used for a site remediation involving the staged or intermittent cleanup of remediation material whereby the remediation activities at the site are started, stopped, and then re-started in a series of intervals, with durations less than 30-days per interval, when the time period from the beginning of the first interval to the end of the last interval exceeds 30 days.

(1) The 30 consecutive calendar day period for a site remediation that qualifies for this exemption is determined according to actions taken by you as defined in paragraphs (b)(1)(i) through (iii) of this section.

(i) The first day of the 30-day period is defined as the day on which you initiate any action that removes, destroys, degrades, transforms, immobilizes, or otherwise manages the remediation materials. The following activities, when completed before beginning this initial action, are not counted as part of the 30-day period: Activities to characterize the type and extent of the contamination by collecting and analyzing samples; activities to obtain permits from Federal, State, or local authorities to conduct the site remediation; activities to schedule workers and necessary equipment; and activities to arrange for contractor or third party assistance in performing the site remediation.

(ii) The last day of the 30-day period is defined as the day on which treatment or disposal of all of the remediation materials generated by the cleanup is completed such that the organic constituents in these materials no longer have a reasonable potential for volatilizing and being released to the atmosphere.

(iii) If treatment or disposal of the remediation materials is conducted at an off-site facility where the final treatment or disposal of the material cannot, or may not, be completed within the 30-day exemption period, then the shipment of all of the remediation material generated from your cleanup that is transferred to another party, or shipped to another facility, within the 30-day period, must be performed according to the applicable requirements specified in §63.7936.

(2) For the purpose of complying with paragraph (b)(1) of this section, if you ship or otherwise transfer the remediation material off-site you must include in the applicable shipping documentation, in addition to any notifications and certifications required under §63.7936, a statement that the shipped material was generated by a site remediation activity subject to the conditions of this exemption. The statement must include the date on which you initiated the site remediation activity generating the shipped remediation materials, as specified in paragraph (b)(1)(i) of this section, and the date 30 calendar days following your initiation date.

(3) You must prepare and maintain at your facility written documentation describing the exempted site remediation, and listing the initiation and completion dates for the site remediation.

[71 FR 69016, Nov. 29, 2006]

§ 63.7885 What are the general standards I must meet for my affected process vents?

(a) For the process vents that comprise the affected source designated under §63.7882, you must select and meet the requirements under one of the options specified in paragraph (b) of this section.

(b) For each affected process vent, except as exempted under paragraph (c) of this section, you must meet one of the options in paragraphs (b)(1) through (3) of this section.
§ 63.7886 What are the general standards I must meet for my affected remediation material management units?

(a) For each remediation material management unit that is part of an affected source designated by §63.7882, you must select and meet the requirements under one of the options specified in paragraphs (b)(1) through (4) of this section.

(b) For each affected remediation material management unit, you must meet one of the options in paragraphs (b)(1) through (4) of this section.

(1) You control HAP emissions from the affected remediation material management unit according to the standards specified in paragraphs (b)(1)(i) through (v) of this section.

(i) If the remediation material management unit is a tank, then you control HAP emissions according to the standards specified in §§63.7895 through 63.7898.

(ii) If the remediation material management unit is a container, then you control HAP emissions according to the standards specified in §§63.7900 through 63.7903.

(iii) If the remediation material management unit is a surface impoundment, then you control HAP emissions according to the standards specified in §§63.7905 through 63.7908.
(iv) If the remediation material management unit is an oil-water or organic-water separator, then you control HAP emissions according to the standards specified in §§63.7910 through 63.7913.

(v) If the remediation material management unit is a transfer system, then you control HAP emissions according to the standards specified in §§63.7915 through 63.7918.

(2) You determine that the average total VOHAP concentration, as defined in §63.7957, of the remediation material managed in the remediation material management unit material is less than 500 ppmw. You must follow the requirements in §63.7943 to demonstrate that the VOHAP concentration of the remediation material has been determined to be less than 500 ppmw, all remediation material management units downstream from the point of determination managing this material meet the requirements of this paragraph unless a remediation process is used that concentrates all, or part of, the remediation material being managed in the unit such that the VOHAP concentration of the material could increase. Any free product returned to the manufacturing process (e.g., recovered oil returned to a storage tank at a refinery) is no longer subject to this subpart.

(3) If the remediation material management unit is also subject to another subpart under 40 CFR part 61 or 40 CFR part 63, you control emissions of the HAP listed in Table 1 of this subpart contained in all of the remediation material management units exempted under this paragraph provided that the total annual quantity of HAP listed in Table 1 of this subpart contained in the remediation material placed in all of the remediation material management units exempted under this paragraph is less than 1 Mg/yr. For each remediation material management unit you select to be exempted under this provision, you must meet the requirements in paragraphs (d)(1) and (2) of this section.

(d) One or a combination of remediation material management units may be exempted at your discretion from the requirements in paragraph (b) of this section provided that the total annual quantity of HAP listed in Table 1 of this subpart contained in the remediation material placed in all of the remediation material management units exempted under this paragraph is less than 1 Mg/yr. For each remediation material management unit you select to be exempted under this provision, you must meet the requirements in paragraphs (d)(1) and (2) of this section.

(1) You must designate each of the remediation material management units you are selecting to be exempted under this paragraph by either submitting to the Administrator a written notification identifying the exempt units or permanently marking the exempt units at the facility site. If you choose to prepare and submit a written notification, this notification must include a site plan, process diagram, or other appropriate documentation identifying each of the exempt units. If you choose to permanently mark the exempt units, each exempt unit must be marked in such a manner that it can be readily identified as an exempt unit.
§ 63.7887 What are the general standards I must meet for my affected equipment leak sources?

(a) You must control HAP emissions from equipment leaks from each equipment component that is part of the affected source by implementing leak detection and control measures according to the standards specified in §§63.7920 through 63.7922 unless you elect to meet the requirements in paragraph (b) of this section.

(b) If the affected equipment leak source is also subject to another subpart in 40 CFR part 61 or 40 CFR part 63, you may control emissions of the HAP listed in Table 1 to this subpart from the affected equipment leak source in compliance with the standards specified in the other applicable subpart. This means you are complying with all applicable emissions limitations and work practice standards under the other subpart (e.g., you implement leak detection and control measures to reduce HAP emissions as specified by the applicable subpart). This provision does not apply to any exemption of the affected source from the emissions limitations and work practice standards allowed by the other applicable subpart.

[71 FR 69017, Nov. 29, 2006]

§ 63.7888 How do I implement this rule at my facility using the cross-referenced requirements in other subparts?

(a) For the purposes of this subpart, when you read the term “HAP listed in Table 1 of this subpart” in a cross-referenced section under 40 CFR part 63, subpart DD—National Emission Standards for Hazardous Air Pollutants from Off-Site Waste and Recovery Operations, you should refer to Table 1 of this subpart.

(b) For the purposes of this subpart, when you read the term off-site material in a cross-referenced section under 40 CFR part 63, subpart DD—National Emission Standards for Hazardous Air Pollutants from Off-Site Waste and Recovery Operations you should substitute the term remediation material, as defined in §63.7957.

(c) For the purposes of this subpart, when you read the term regulated material in a cross-referenced section under 40 CFR part 63, subparts OO, PP, QQ, RR, TT, UU, WW, and VV you should substitute the term remediation material, as defined in §63.7957.

PROCEDURE VENTS

§ 63.7890 What emissions limitations and work practice standards must I meet for process vents?

(a) You must control HAP emissions from each new and existing process vent subject to §63.7885(b)(1) according to emissions limitations and work practice standards in this section that apply to your affected process vents.

(b) For your affected process vents, you must meet one of the facility-wide emission limit options specified in paragraphs (b)(1) through (4) of this section. If you have multiple affected process vent streams, you may comply with this paragraph using a combination of controlled and uncontrolled process vent streams that achieve the facility-wide emission limit that applies to you.

(1) Reduce from all affected process vents the total emissions of the HAP listed in Table 1 of this subpart to a
Environmental Protection Agency

§ 63.7893

level less than 1.4 kilograms per hour (kg/hr) and 2.8 Mg/yr (3.0 pounds per hour (lb/hr) and 3.1 tpy); or

(2) Reduce from all affected process vents the emissions of total organic compounds (TOC) (minus methane and ethane) to a level below 1.4 kg/hr and 2.8 Mg/yr (3.0 lb/hr and 3.1 tpy); or

(3) Reduce from all affected process vents the total emissions of the HAP listed in Table 1 of this subpart from all affected process vents are reduced by 95 percent by weight or more; or

(4) Reduce from all affected process vents the emissions of TOC (minus methane and ethane) to a level below 1.4 kg/hr and 2.8 Mg/yr (3.0 lb/hr and 3.1 tpy); or

(b) For each closed vent system and control device you use to comply with § 63.7890(b), you must meet the operating limit requirements and work practice standards in § 63.7925(c) through (j) that apply to your closed vent system and control device.

[68 FR 58190, Oct. 8, 2003, as amended at 71 FR 69017, Nov. 29, 2006]

§ 63.7891 How do I demonstrate initial compliance with the emissions limitations and work practice standards for process vents?

(a) You must demonstrate initial compliance with the emissions limitations and work practice standards in § 63.7890(b) applicable to your affected process vents by meeting the requirements in paragraphs (b) through (d) of this section.

(b) You have measured or determined using the procedures for performance tests and design evaluations in § 63.7941 that emission levels from all of your affected process vents meet the facility-wide emission limits in § 63.7890(b) that apply to you, as specified in paragraphs (b)(1) through (4) of this section.

(1) If you elect to meet § 63.7890(b)(1), you demonstrate that the total emissions of the HAP listed in Table 1 of this subpart from all affected process vents at your facility are less than 1.4 kg/hr and 2.8 Mg/yr (3.0 lb/hr and 3.1 tpy).

(2) If you elect to meet § 63.7890(b)(2), you demonstrate that emissions of TOC (minus methane and ethane) from all affected process vents at your facility are less than 1.4 kg/hr and 2.8 Mg/yr (3.0 lb/hr and 3.1 tpy).

(3) If you elect to meet § 63.7890(b)(3), you demonstrate that the total emissions of the HAP listed in Table 1 of this subpart from all affected process vents are reduced by 95 percent by weight or more.

(4) If you elect to meet § 63.7890(b)(4), you demonstrate that the emissions of TOC (minus methane and ethane) from all affected process vents are reduced by 95 percent by weight or more.

(c) For each closed vent system and control device you use to comply with § 63.7890(b), you have met each requirement for demonstrating initial compliance with the emissions limitations and work practice standards for a closed vent system and control device in § 63.7926.

(d) You have submitted a notification of compliance status according to the requirements in § 63.7950.

§ 63.7892 What are my inspection and monitoring requirements for process vents?

For each closed vent system and control device you use to comply with § 63.7890(b), you must monitor and inspect the closed vent system and control device according to the requirements in § 63.7927 that apply to you.

§ 63.7893 How do I demonstrate continuous compliance with the emissions limitations and work practice standards for process vents?

(a) You must demonstrate continuous compliance with the emissions limitations and work practice standards in § 63.7890 applicable to your affected process vents by meeting the requirements in paragraphs (b) through (d) of this section.

(b) You must maintain emission levels from all of your affected process vents to meet the facilitywide emission limits in § 63.7890(b) that apply to you, as specified in paragraphs (b)(1) through (4) of this section.

(1) If you elect to meet § 63.7890(b)(1), you maintain the total emissions of the HAP listed in Table 1 of this subpart from all affected process vents at your facility are less than 1.4 kg/hr and 2.8 Mg/yr (3.0 lb/hr and 3.1 tpy).

(2) If you elect to meet § 63.7890(b)(2), you maintain emissions of TOC (minus methane and ethane) from all affected process vents at your facility are less
than 1.4 kg/hr and 2.8 Mg/yr (3.0 lb/hr and 3.1 tpy).

(3) If you elect to meet §63.7890(b)(3), you maintain the total emissions of the HAP listed in Table 1 of this subpart from all affected process vents are reduced by 95 percent by weight or more.

(4) If you elect to meet §63.7890(b)(4), you maintain the emissions of TOC (minus methane and ethane) from all affected process vents are reduced by 95 percent by weight or more.

(c) For each closed vent system and control device you use to comply with §63.7890(b), you have met each requirement for demonstrating continuous compliance with the emission limitations and work practice standards for a closed vent system and control device in §63.7928.

(d) Keeping records to document continuous compliance with the requirements of this subpart according to the requirements in §63.7952.

[68 FR 58190, Oct. 8, 2003, as amended at 71 FR 69017, Nov. 29, 2006]

TANKS
§ 63.7895 What emissions limitations and work practice standards must I meet for tanks?

(a) You must control HAP emissions from each new and existing tank subject to §63.7886(b)(1)(i) according to emissions limitations and work practice standards in this section that apply to your affected tanks.

(b) For each affected tank, you must install and operate air pollution controls that meet the requirements in paragraphs (b)(1) through (4) of this section that apply to your affected tanks.

(1) Unless your tank is used for a waste stabilization process as defined in §63.7957, you must determine the maximum HAP vapor pressure (expressed in kilopascals (kPa)) of the remediation material placed in your tank using the procedures specified in §63.7944.

(2) If the maximum HAP vapor pressure of the remediation material you place in your tank is less than 76.6 kPa, then you must determine which tank level controls (i.e., Tank Level 1 or Tank Level 2) apply to your tank as shown in Table 2 of this subpart, and based on your tank’s design capacity (expressed in cubic meters (m³)) and the maximum HAP vapor pressure of the remediation material you place in this tank. If your tank is required by Table 2 of this subpart to use Tank Level 1 controls, then you must meet the requirements in paragraph (c) of this section. If your tank is required by Table 2 of this subpart to use Tank Level 2 controls, then you must meet the requirements in paragraph (d) of this section.

(3) If maximum HAP vapor pressure of the remediation material you place in your tank is 76.6 kPa or greater, then the tank must use one of the Tank Level 2 controls specified in paragraphs (d)(3) through (5) of this section. Use of floating roofs under paragraph (d)(1) or (2) of this section is not allowed for tanks managing these remediation materials.

(4) A tank used for a waste stabilization process, as defined in §63.7957, must use one of Tank Level 2 controls, as specified in paragraph (d) of this section, that is appropriate for your waste stabilization process.

(c) If you use Tank Level 1 controls, you must install and operate a fixed roof according to the requirements in §63.902. As an alternative to using this fixed roof, you may choose to use one of Tank Level 2 controls in paragraph (d) of this section.

(d) If you use Tank Level 2 controls, you must meet the requirements of one of the options in paragraphs (d)(1) through (5) of this section.

(1) Install and operate a fixed roof with an internal floating roof according to the requirements in §63.1063(a)(1)(i), (a)(2), and (b); or

(2) Install and operate an external floating roof according to the requirements in §63.1063(a)(1)(ii), (a)(2), and (b); or

(3) Install and operate a fixed roof vented through a closed vent system to a control device according to the requirements in §63.685(g). You must meet the emissions limitations and work practice standards in §63.7925 that apply to your closed vent system and control device; or

(4) Install and operate a pressure tank according to the requirements in §63.685(h); or
(5) Locate the tank inside a permanent total enclosure and vent emissions from the enclosure through a closed vent system to a control device that is an enclosed combustion device according to the requirements in §63.685(a). You must meet the emissions limitations and work practice standards in §63.7925 that apply to your closed vent system and control device.

(e) As provided in §63.6(g), you may request approval from the EPA to use an alternative to the work practice standards in this section that apply to your tanks. If you request for permission to use an alternative to the work practice standards, you must submit the information described in §63.6(g)(2).

§ 63.7896 How do I demonstrate initial compliance with the emissions limitations and work practice standards for tanks?

(a) You must demonstrate initial compliance with the emissions limitations and work practice standards in §63.7895 that apply to your affected tanks by meeting the requirements in paragraphs (b) through (h) of this section, as applicable to your containers.

(b) You have submitted as part of your notification of compliance status, specified in §63.7950, a signed statement that you have met the requirements in paragraphs (b)(1) and (2) of this section.

(1) You have determined the applicable tank control levels specified in §63.7895(b) for the tanks to be used for your site remediation.

(2) You have determined, according to the procedures in §63.7944, and recorded the maximum HAP vapor pressure of the remediation material placed in each affected tank subject to §63.7886(b)(1)(i) that does not use Tank Level 2 controls.

(c) You must demonstrate initial compliance of each tank determined under paragraph (b) of this section to require Tank Level 1 controls if you have met the requirements in paragraphs (c)(1) through (3) of this section.

(1) Each tank using Tank Level 1 controls is equipped with a fixed roof and closure devices according to the requirements in §63.902(b) and (c) and you have records documenting the design.

(2) You have performed an initial visual inspection of the fixed roof and closure devices for defects according to the requirements in §63.906(a) and you have records documenting the inspection results.

(3) You will operate the fixed roof and closure devices according to the requirements in §63.902.

(d) You must demonstrate initial compliance of each tank determined under paragraph (b) of this section to require Tank Level 2 controls and using a fixed roof with an internal floating roof according to §63.7895(d)(1) if you have submitted as part of your notification of compliance status, specified in §63.7950, a signed statement that you have met the requirements in paragraphs (d)(1) through (3) of this section.

(1) Each tank is equipped with an internal floating roof that meets the requirements in §63.1063(a) and you have records documenting the design.

(2) You will operate the internal floating roof according to the requirements in §63.1063(b).

(3) You have performed an initial visual inspection according to the requirements in §63.1063(d)(1) and you have a record of the inspection results.

(e) You must demonstrate initial compliance of each tank determined under paragraph (b) of this section to require Tank Level 2 controls and using an external floating roof according to §63.7895(d)(2) if you have submitted as part of your notification of compliance status, specified in §63.7950, a signed statement that you have met the requirements in paragraphs (e)(1) through (3) of this section.

(1) Each tank is equipped with an external floating roof that meets the requirements in §63.1063(a) and you have records documenting the design.

(2) You will operate the external floating roof according to the requirements in §63.1063(b).

(3) You have performed an initial seal gap measurement inspection according to the requirements in §63.1063(d)(3) and you have records of the measurement results.

(f) You must demonstrate initial compliance of each tank determined
under paragraph (b) of this section to require Tank Level 2 controls and using a fixed roof vented to a control device according to §63.7895(d)(3) if you have submitted as part of your notification of compliance status, specified in §63.7950, a signed statement that you have met the requirements in paragraphs (f)(1) through (4) of this section.

(1) Each tank is equipped with a fixed roof and closure devices according to the requirements in §63.902(b) and (c) and you have records documenting the design.

(2) You have performed an initial visual inspection of fixed roof and closure devices for defects according to the requirements in §63.695(b)(3) and you have records documenting the inspection results.

(3) You will operate the fixed roof and closure devices according to the requirements in §63.685(g).

(4) You have met each applicable requirement for demonstrating initial compliance with the emission limitations and work practice standards for a closed vent system and control device in §63.7926.

(g) You must demonstrate initial compliance of each tank determined under paragraph (b) of this section to require Tank Level 2 controls and operates as a pressure tank according to §63.7895(d)(4) if you have submitted as part of your notification of compliance status, specified in §63.7950, a signed statement that you have met the requirements in paragraphs (g)(1) and (2) of this section.

(1) Each tank is designed to operate as a pressure tank according to the requirements in §63.685(h), and you have records documenting the design.

(2) You will operate the pressure tank and according to the requirements in §63.685(h).

(h) You must demonstrate initial compliance of each tank determined under paragraph (b) of this section to require Tank Level 2 controls and using a permanent total enclosure vented to an enclosed combustion device according to §63.7895(d)(5) if you have submitted as part of your notification of compliance status, specified in §63.7950, a signed statement that you have met the requirements in paragraphs (h)(1) and (2) of this section.

(1) You have submitted as part of your notification of compliance status a signed statement that you have performed the verification procedure according to the requirements in §63.885(i), and you have records of the supporting calculations and measurements.

(2) You have met each applicable requirement for demonstrating initial compliance with the emission limitations and work practice standards for a closed vent system and control device in §63.7926.

§63.7897 What are my inspection and monitoring requirements for tanks?

(a) You must visually inspect each of your tanks using Tank Level 1 controls for defects at least annually according to the requirements in §63.906(a).

(b) You must inspect and monitor each of your tanks using Tank Level 2 controls according to the requirements in paragraphs (b)(1) through (5), as applicable to your tanks.

(1) If you use a fixed roof with an internal floating roof according to §63.7895(d)(1), you must visually inspect the fixed roof and internal floating roof according to the requirements in §63.1063(d)(1) and (2).

(2) If you use an external floating roof according to §63.7895(d)(2), you must visually inspect the external floating roof according to the requirements in §63.1063(d)(1) and inspect the seals according to the requirements in §63.1063(d)(2) and (3).

(3) If you use a fixed roof vented to a control device according to §63.7895(d)(3), you must meet requirements in paragraphs (b)(3)(i) and (ii) of this section.

(i) You must visually inspect the fixed roof and closure devices for defects according to the requirements in §63.695(b)(3).

(ii) You must monitor and inspect the closed vent system and control device according to the requirements in §63.7927 that apply to you.

(4) If you use a pressure tank according to §63.7895(d)(4), you must visually inspect the tank and its closure devices for defects at least annually to ensure
they are operating according to the design requirements in §63.685(h).

(5) If you use a permanent total enclosure vented to an enclosed combustion device according to §63.7895(d)(5), you must meet requirements in paragraphs (b)(5)(i) and (ii) of this section.

(i) You must perform the verification procedure for the permanent total enclosure at least annually according to the requirements in §63.685(i).

(ii) You must monitor and inspect the closed vent system and control device according to the requirements in §63.7927 that apply to you.

§ 63.7898 How do I demonstrate continuous compliance with the emissions limitations and work practice standards for tanks?

(a) You must demonstrate continuous compliance with the emissions limitations and work practice standards in §63.7895 applicable to your affected tanks by meeting the requirements in paragraphs (b) through (d) of this section.

(b) You must demonstrate continuous compliance with the requirement to determine the applicable tank control level specified in §63.7895(b) for each affected tank by meeting the requirements in paragraphs (b)(1) through (3) of this section.

(1) Keeping records of the tank design capacity according to the requirements in §63.1065(a).

(2) For tanks subject to §63.7886(b)(1)(ii) and not using Tank Level 2 controls, meeting the requirements in paragraphs (b)(2)(i) and (ii) of this section.

(i) Keeping records of the maximum HAP vapor pressure determined according to the procedures in §63.7944 for the remediation material placed in each affected tank.

(ii) Performing a new determination of the maximum HAP vapor pressure whenever changes to the remediation material managed in the tank could potentially cause the maximum HAP vapor pressure to increase to a level that is equal to or greater than the maximum HAP vapor pressure for the tank design capacity specified in Table 2. You must keep records of each determination.

(3) Keeping records to document compliance with the requirements of this subpart according to the requirements in §63.7952.

(c) You must demonstrate continuous compliance for each tank determined to require Tank Level 1 controls by meeting the requirements in paragraphs (c)(1) through (5) of this section.

(1) Operating and maintaining the fixed roof and closure devices according to the requirements in §63.902(c).

(2) Visually inspecting the fixed roof and closure devices for defects at least annually according to the requirements in §63.906(a).

(3) Repairing defects according to the requirements in §63.906(b).

(4) Recording the information specified in §63.907(a)(3) and (b).

(5) Keeping records to document compliance with the requirements of this subpart according to the requirements in §63.7952.

(d) You must demonstrate continuous compliance for each tank determined to require Tank Level 2 controls and using a fixed roof with an internal floating roof according to §63.7895(d)(1) by meeting the requirements in paragraphs (d)(1) through (5) of this section.

(1) Operating and maintaining the internal floating roof according to the requirements in §63.1063(b).

(2) Visually inspecting the internal floating roof according to the requirements in §63.1063(d)(1) and (2).

(3) Repairing defects according to the requirements in §63.1063(e).

(4) Recording the information specified in §63.1065(b) through (d).

(5) Keeping records to document compliance with the requirements of this subpart according to the requirements in §63.7952.

(e) You must demonstrate continuous compliance for each tank determined to require Tank Level 2 controls and using an external floating roof according to §63.7895(d)(2) by meeting the requirements in paragraphs (e)(1) through (5) of this section.

(1) Operating and maintaining the external floating roof according to the requirements in §63.1063(b).

(2) Visually inspecting the external floating roof according to the requirements in §63.1063(d)(1) and inspecting
§ 63.7900 Contain­ers

(a) You must control HAP emissions from each new and existing container subject to §63.7886(b)(1)(ii) according to emissions limitations and work practice standards in this section that apply to your affected containers.

(b) For each container having a design capacity greater than 0.1 m³ you must meet the requirements in paragraph (b)(1) or (2) of this section that apply to your container except at the times the container is used for treatment of remediation material by a waste stabilization process, as defined in §63.7957. As an alternative for any container subject to this paragraph, you may choose to meet the requirements in paragraph (d) of this section.

1. Operating and maintaining the pressure tank and closure devices according to the requirements in §63.685(h).

2. Visually inspecting each pressurized tank and closure devices for defects at least annually to ensure they are operating according to the design requirements in §63.685(h), and recording the results of each inspection.

3. Keeping records to document compliance with the requirements of this subpart according to the requirements in §63.7952.

4. You must demonstrate continuous compliance for each tank determined to require Tank Level 2 controls and using a permanent total enclosure vented to an enclosed combustion device according to §63.7895(d)(5) by meeting the requirements in paragraphs (b)(1) through (4) of this section.

1. Operating and maintaining the fixed roof and closure devices according to the requirements in §63.685(g).

2. Visually inspecting the fixed roof and closure devices for defects at least annually according to the requirements in §63.695(b)(3)(i).

3. Repairing defects according to the requirements in §63.695(b)(4).

4. Recording the information specified in §63.696(e).

5. Meeting each applicable requirement for demonstrating continuous compliance with the emissions limitations and work practice standards for a closed vent system and control device in §63.7928.

6. Keeping records to document compliance with the requirements of this subpart according to the requirements in §63.7952.


CONTAINERS

§ 63.7900 What emissions limitations and work practice standards must I meet for containers?

(a) You must control HAP emissions from each new and existing container subject to §63.7886(b)(1)(ii) according to emissions limitations and work practice standards in this section that apply to your affected containers.

(b) For each container having a design capacity greater than 0.1 m³ you must meet the requirements in paragraph (b)(1) or (2) of this section that apply to your container except at the times the container is used for treatment of remediation material by a waste stabilization process, as defined in §63.7957. As an alternative for any container subject to this paragraph, you may choose to meet the requirements in paragraph (d) of this section.

1. Operating and maintaining the pressure tank and closure devices according to the requirements in §63.685(h).

2. Visually inspecting each pressurized tank and closure devices for defects at least annually to ensure they are operating according to the design requirements in §63.685(h), and recording the results of each inspection.

3. Keeping records to document compliance with the requirements of this subpart according to the requirements in §63.7952.


Environmental Protection Agency § 63.7901

(2) If the design capacity of your container is greater than 0.46 m³, then you must use controls according to the standards for Container Level 2 controls as specified in § 63.923 except as provided for in paragraph (b)(3) of this section.

(3) As an alternative to meeting the standards in paragraph (b)(2) of this section for containers with a capacity greater than 0.46 m³, if you determine that either of the conditions in paragraphs (b)(3)(i) or (ii) apply to the remediation material placed in your container, then you may use controls according to the standards for Container Level 1 controls as specified in § 63.922.

(i) Vapor pressure of every organic constituent in the remediation material placed in your container is less than 0.3 kPa at 20 °C; or

(ii) Total concentration of the pure organic constituents having a vapor pressure greater than 0.3 kPa at 20 °C in the remediation material placed in your container is less than 20 percent by weight.

(c) At times when a container having a design capacity greater than 0.1 m³ is used for treatment of a remediation material by a waste stabilization process as defined in § 63.7907, you must control air emissions from the container during the process whenever the remediation material in the container is exposed to the atmosphere according to the standards for Container Level 3 controls as specified in § 63.924. You must meet the emissions limitations and work practice standards in § 63.7925 that apply to your closed vent system and control device.

(d) As an alternative to meeting the requirements in paragraph (b) of this section, you may choose to use controls on your container according to the standards for Container Level 3 controls as specified in § 63.924. You must meet the emissions limitations and work practice standards in § 63.7925 that apply to your closed vent system and control device.

(e) As provided in § 63.6(g), you may request approval from the EPA to use an alternative to the work practice standards in this section that apply to your containers. If you request for permission to use an alternative to the work practice standards, you must submit the information described in § 63.6(g)(2).

§ 63.7901 How do I demonstrate initial compliance with the emissions limitations and work practice standards for containers?

(a) You must demonstrate initial compliance with the emissions limitations and work practice standards in § 63.7990 that apply to your affected containers by meeting the requirements in paragraphs (b) through (e) of this section, as applicable to your containers.

(b) You have submitted as part of your notification of compliance status, specified in § 63.7950, a signed statement that you have met the requirements in paragraphs (b)(1) and (2) of this section.

(1) You have determined the applicable container control levels specified in § 63.7990 for the containers to be used for your site remediation.

(2) You have determined and recorded the maximum vapor pressure or total organic concentration for the remediation material placed in containers with a design capacity greater than 0.46 m³, and do not use Container Level 2 or Level 3 controls.

(c) You must demonstrate initial compliance of each container determined under paragraph (b) of this section to require Container Level 1 controls if you have submitted as part of your notification of compliance status, specified in § 63.7950, a signed statement that you have met the requirements in paragraphs (c)(1) and (2) of this section.

(1) Each container using Container Level 1 controls will be one of the containers specified in § 63.922(b).

(2) You will operate each container cover and closure device according to the requirements in § 63.922(d).

(d) You must demonstrate initial compliance of each container determined under paragraph (b) of this section to require Container Level 2 controls if you have submitted as part of your notification of compliance status, specified in § 63.7950, a signed statement that you have met the requirements in paragraphs (d)(1) through (4) of this section.

(1) Each container using Container Level 2 controls will be one of the containers specified in § 63.923(b).
§ 63.7902 What are my inspection and monitoring requirements for containers?

(a) You must inspect each container using Container Level 1 or Container Level 2 controls according to the requirements in §63.926(a).

(b) If you use Container Level 3 controls, you must meet requirements in paragraphs (b)(1) and (2) of this section, as applicable to your site remediation.

(1) You must perform the verification procedure for each permanent total enclosure annually according to the requirements in §63.924(c)(1).

(2) You must monitor and inspect each closed vent system and control device according to the requirements in §63.7927 that apply to you.

§ 63.7903 How do I demonstrate continuous compliance with the emissions limitations and work practice standards for containers?

(a) You must demonstrate continuous compliance with the emissions limitations and work practice standards in §63.7990 applicable to your affected containers by meeting the requirements in paragraphs (b) through (e) of this section.

(b) You must demonstrate continuous compliance with the requirement to determine the applicable container control level specified in §63.7900(b) for each affected tank by meeting the requirements in paragraphs (b)(1) through (3) of this section.

(1) Keeping records of the quantity and design capacity for each type of container used for your site remediation and subject to §63.7886(b)(1)(ii).

(2) For containers subject to §63.7886(b)(1)(ii) with a design capacity greater than 0.46 m³ and not using Container Level 2 or Container Level 3 controls, meeting the requirements in paragraphs (b)(2)(i) and (ii) of this section.

(i) Keeping records of the maximum vapor pressure or total organic concentration for the remediation material placed in the containers, as applicable to the conditions in §63.7900(b)(3)(i) or (ii), as applicable to your containers. You must keep records of each determination.

(ii) Performing a new determination whenever changes to the remediation material placed in the containers could potentially cause the maximum vapor pressure or total organic concentration to increase to a level that is equal to or greater than the conditions specified in §63.7900(b)(3)(i) or (ii), as applicable to your containers. You must keep records of each determination.

(3) Keeping records to document compliance with the requirements according to the requirements in §63.7952.

(c) You must demonstrate continuous compliance for each container determined to require Container Level 1 controls by meeting the requirements
Environmental Protection Agency

§ 63.7905

in paragraphs (c)(1) through (5) of this section.

(1) Operating and maintaining covers for each container according to the requirements in §63.922(d).

(2) Inspecting each container annually according to the requirements in §63.926(a)(2).

(3) Emptying or repairing each container according to the requirements in §63.926(a)(3).

(4) Keeping records of an inspection that includes the information in paragraphs (a)(4)(i) and (ii) of this section.

(i) Date of each inspection; and

(ii) If a defect is detected during an inspection, the location of the defect, a description of the defect, the date of detection, the corrective action taken to repair the defect, and if repair is delayed, the reason for any delay and the date completion of the repair is expected.

(5) Keeping records to document compliance with the requirements according to the requirements in §63.7952.

(d) You must demonstrate continuous compliance for each container determined to require Container Level 2 controls by meeting the requirements in paragraphs (d)(1) through (6) of this section.

(1) Transferring remediation material in and out of the container according to the requirements in §63.923(c).

(2) Operating and maintaining container covers according to the requirements in §63.923(d).

(3) Inspecting each container annually according to the requirements in §63.926(a)(2).

(4) Emptying or repairing containers according to the requirements in §63.926(a)(3).

(5) Keeping records of each inspection that include the information in paragraphs (d)(5)(i) and (ii) of this section.

(i) Date of each inspection; and

(ii) If a defect is detected during an inspection, the location of the defect, a description of the defect, the date of detection, the corrective action taken to repair the defect, and if repair is delayed, the reason for any delay and the date completion of the repair is expected.

(6) Keeping records to document compliance with the requirements of this subpart according to the requirements in §63.7952.

(e) You must demonstrate continuous compliance for each container determined to require Container Level 3 controls by meeting the requirements in paragraphs (e)(1) through (4) of this section.

(i) Performing the verification procedure for the enclosure annually according to the requirements in §63.686(i).

(ii) Recording the information specified in §63.696(1).

(2) Meeting each applicable requirement for demonstrating continuous compliance with the emissions limitations and work practice standards for a closed vent system and control device in §63.7928.

(3) Keeping records to document compliance with the requirements of this subpart according to the requirements in §63.7952.

SURFACE IMPOUNDMENTS

§ 63.7905 What emissions limitations or work practice standards must I meet for surface impoundments?

(a) You must control HAP emissions from each new and existing surface impoundment subject to §63.7886(b)(1)(iii) according to emissions limitations and work practice standards in this section that apply to your affected surface impoundments.

(b) For each affected surface impoundment, you must install and operate air pollution controls that meet either of the options in paragraphs (b)(1) or (2) of this section.

(1) Install and operate a floating membrane cover according to the requirements in §63.942; or

(2) Install and operate a cover vented through a closed vent system to a control device according to the requirements in §63.943. You must meet the emissions limitations and work practice standards in §63.7925 that apply to your closed vent system and control device.

(c) As provided in §63.6(g), you may request approval from the EPA to use an alternative to the work practice standards in this section that apply to your surface impoundments. If you request for permission to use an alternative to the work practice standards,
§ 63.7906 How do I demonstrate initial compliance with the emissions limitations or work practice standards for surface impoundments?

(a) You must demonstrate initial compliance with the emissions limitations and work practice standards in §63.7905 that apply to your affected surface impoundments by meeting the requirements in paragraphs (b) and (c) of this section, as applicable to your surface impoundments.

(b) You must demonstrate initial compliance of each surface impoundment using a floating membrane cover according to §63.7905(b)(1) if you have submitted as part of your notification of compliance status, specified in §63.7950, a signed statement that you have met the requirements in paragraphs (b)(1) through (3) of this section.

(1) You have installed a floating membrane cover and closure devices that meet the requirements in §63.942(b), and you have records documenting the design and installation.

(2) You will operate the cover and closure devices according to the requirements in §63.942(c).

(3) You have performed an initial visual inspection of each surface impoundment and closure devices according to the requirements in §63.946(b), and you have records documenting the inspection results.

(c) You must demonstrate initial compliance of each surface impoundment using a cover vented to a control device according to §63.7905(b)(2) if you have submitted as part of your notification of compliance status, specified in §63.7950, a signed statement that you have met the requirements in paragraphs (c)(1) through (4) of this section.

(1) You have installed a cover and closure devices that meet the requirements in §63.943(b), and have records documenting the design and installation.

(2) You will operate the cover and closure devices according to the requirements in §63.943(c).

(3) You have performed an initial visual inspection of each cover and closure devices according to the requirements in §63.946(c).

(4) You have met each applicable requirement for demonstrating initial compliance with the emission limitations and work practice standards for a closed vent system and control device in §63.7926.

§ 63.7907 What are my inspection and monitoring requirements for surface impoundments?

(a) If you use a floating membrane cover according to §63.7905(b)(1), you must visually inspect the floating membrane cover and its closure devices at least annually according to the requirements in §63.946(a).

(b) If you use a cover vented to a control device according to §63.7905(b)(2), you must meet requirements in paragraphs (b)(1) and (2) of this section.

(1) You must visually inspect the cover and its closure devices for defects according to the requirements in §63.946(b).

(2) You must monitor and inspect the closed vent system and control device according to the requirements in §63.7927 that apply to you.

§ 63.7908 How do I demonstrate continuous compliance with the emissions limitations and work practice standards for surface impoundments?

(a) You must demonstrate continuous compliance with the emissions limitations and work practice standards in §63.7905 applicable to your affected surface impoundments by meeting the requirements in paragraphs (b) and (c) of this section as applicable to your surface impoundments.

(b) You must demonstrate continuous compliance for each surface impoundment using a floating membrane cover according to §63.7905(b)(1) by meeting the requirements in paragraphs (b)(1) through (5) of this section.

(1) Operating and maintaining the floating membrane cover and closure devices according to the requirements in §63.942(c).

(2) Visually inspecting the floating membrane cover and closure devices for defects at least annually according to the requirements in §63.946(a).

(3) Repairing defects according to the requirements in §63.946(c).
Environmental Protection Agency

\section*{§ 63.7911 How do I demonstrate initial compliance with the emissions limitations and work practice standards for separators?}

(a) You must demonstrate initial compliance with the emissions limitations and work practice standards in §63.7910 that apply to your affected separators by meeting the requirements in paragraphs (b) through (d) of this section.

(1) You have installed a floating roof and closure devices that meet the requirements in §63.1043(b), and you have records documenting the design and installation.

(2) You will operate the floating roof and closure devices according to the requirements in §63.1043(c).

(3) You have performed an initial seal gap measurement inspection using the procedures in §63.1046(b), and you have records documenting the measurement results.

(4) You have performed an initial visual inspection of the floating roof and closure devices for defects according to the requirements in §63.1047(b)(2), and you have records documenting the inspection results.

(5) For any portions of the separator using a fixed roof vented to a control device according to the requirements in §63.1044, you must meet the emissions limitations and work practice standards in §63.7925 that apply to your closed vent system and control device.

(6) You must demonstrate continuous compliance for each surface impoundment using a cover vented to a control device according to §63.7905(b)(2) by meeting the requirements in paragraphs (c)(1) through (6) of this section.

(c) As provided in §63.6(g), you may request approval from the EPA to use an alternative to the work practice standards in this section that apply to your separators. If you request for permission to use an alternative to the work practice standards, you must submit the information described in §63.6(g)(2).
§ 63.7912 What are my inspection and monitoring requirements for separators?

(a) If you use a floating roof according to §63.7910(b)(1), you must meet the requirements in paragraphs (a)(1) and (2) of this section.

(1) Measure the seal gaps at least annually according to the requirements in §63.1047(b)(1).

(2) Visually inspect the floating roof at least annually according to the requirements in §63.1047(b)(2).

(b) If you use a cover vented to a control device according to §63.7910(b)(2), you must meet the requirements in paragraphs (b)(1) and (2) of this section.

(1) You must visually inspect the cover and its closure devices for defects according to the requirements in §63.1047(c).

(2) You must monitor and inspect the closed vent system and control device according to the requirements in §63.7927 that apply to you.

(c) You must demonstrate initial compliance of each separator using a fixed roof vented to a control device according to §63.7910(b)(1), if you have submitted as part of your notification of compliance status, specified in §63.7950, a signed statement that you have met the requirements in paragraphs (c)(1) through (4) of this section.

(1) You have installed a fixed roof and closure devices that meet the requirements in §63.1042(b), and you have records documenting the design and installation.

(2) You will operate the fixed roof and its closure devices according to the requirements in §63.1042(c).

(3) You have performed an initial visual inspection of the fixed roof and closure devices for defects according to the requirements in §63.1047(a).

(4) You have met each applicable requirement for demonstrating initial compliance with the emission limitations and work practice standards for a closed vent system and control device in §63.7926.

(d) You must demonstrate initial compliance of each pressurized separator that operates as a closed system according to §63.7910(b)(3) if you have submitted as part of your notification of compliance status, specified in §63.7950, a signed statement that you have met the requirements in paragraphs (d)(1) and (2) of this section.

(1) You have installed a pressurized separator that operates as a closed system according to the requirements in §63.1045(b)(1) and (b)(2), and you have records of the design and installation.

(2) You will operate the pressurized separator as a closed system according to the requirements in §63.1045(b)(3).

§ 63.7913 How do I demonstrate continuous compliance with the emissions limitations and work practice standards for separators?

(a) You must demonstrate continuous compliance with the emissions limitations and work practice standards in §63.7910 applicable to your affected separators by meeting the requirements in paragraphs (b) through (d) of this section as applicable to your surface impoundments.

(b) You must demonstrate continuous compliance for each separator using a floating roof according to §63.7910(b)(1) by meeting the requirements in paragraphs (b)(1) through (6) of this section.

(1) Operating and maintaining the floating roof according to the requirements in §63.1043(b).

(2) Performing seal gap measurement inspections at least annually according to the requirements in §63.1047(b)(1).

(3) Visually inspecting the floating roof at least annually according to the requirements in §63.1047(b)(2).

(4) Repairing defects according to the requirements in §63.1047(d).

(5) Recording the information specified in §63.1048(a) and (b).

(6) Keeping records to document compliance with the requirements according to the requirements in §63.7952.

(c) You must demonstrate continuous compliance for each separator using a
fixed roof vented through a closed vent system to a control device according to §63.7910(b)(2) by meeting the requirements in paragraphs (c)(1) through (6) of this section.

1. Operating and maintaining the fixed roof and its closure devices according to the requirements in §63.1042.

2. Performing visual inspections of the fixed roof and its closure devices for defects at least annually according to the requirements in §63.1047(a).

3. Repairing defects according to the requirements in §63.1047(d).

4. Recording the information specified in §63.1048(a).

5. Meeting each applicable requirement for demonstrating continuous compliance with the emission limitations and work practice standards for a closed vent system and control device in §63.7925.

6. Keeping records to document compliance with the requirements of this subpart according to the requirements in §63.7952.

You must demonstrate continuous compliance for each pressurized separator operated as a closed system according to §63.7910(b)(3) by meeting the requirements in paragraphs (d)(1) and (2) of this section.

1. Operating the pressurized separator at all times according to the requirements in §63.1045.

2. Visually inspecting each pressurized tank and closure devices for defects at least annually to ensure they are operating according to the design requirements in §63.1045(b), and recording the results of each inspection.

[68 FR 58190, Oct. 8, 2003, as amended at 71 FR 69017, Nov. 29, 2006]

TRANSFER SYSTEMS

§ 63.7915 What emissions limitations and work practice standards must I meet for transfer systems?

(a) You must control HAP emissions from each new and existing transfer system subject to §63.7886(b)(1)(v) according to emissions limitations and work practice standards in this section that apply to your affected transfer systems.

(b) For each affected transfer system that is an individual drain system as defined in §63.7957, you must install and operate controls according to the requirements in §63.962.

(c) For each affected transfer system that is not an individual drain system as defined in §63.7957, you must use one of the transfer systems specified in paragraphs (c)(1) through (3) of this section.

1. A transfer system that uses covers according to the requirements in §63.689(d).

2. A transfer system that consists of continuous hard piping. All joints or seams between the pipe sections must be permanently or semi-permanently sealed (e.g., a welded joint between two sections of metal pipe or a bolted and gasketed flange).

3. A transfer system that is enclosed and vented through a closed vent system to a control device according to the requirements specified in paragraphs (c)(3)(i) and (ii) of this section.

(i) The transfer system is designed and operated such that an internal pressure in the vapor headspace in the enclosure is maintained at a level less than atmospheric pressure when the control device is operating, and

(ii) The closed vent system and control device are designed and operated to meet the emissions limitations and work practice standards in §63.7925 that apply to your closed vent system and control device.

(d) As provided in §63.6(g), you may request approval from the EPA to use an alternative to the work practice standards in this section that apply to your transfer systems. If you request permission to use an alternative to the work practice standards, you must submit the information described in §63.6(g)(2).

[68 FR 58190, Oct. 8, 2003, as amended at 71 FR 69018, Nov. 29, 2006]

§ 63.7916 How do I demonstrate initial compliance with the emissions limitations and work practice standards for transfer systems?

(a) You must demonstrate initial compliance with the emissions limitations and work practice standards in §63.7915 that apply to your affected transfer systems by meeting the requirements in paragraphs (b) through (e) of this section, as applicable to your transfer systems.
§ 63.7917  What are my inspection and monitoring requirements for transfer systems?

(a) If you operate an individual drain system as a transfer system according to §63.7915(b), you must visually inspect each individual drain system at least annually according to the requirements in §63.689(a), and you have records documenting the design and installation.

(b) If you operate a transfer system consisting of hard piping according to §63.7915(c)(2), you must annually inspect the unburied portion of pipeline and all joints for leaks and other defects. In the event that a defect is detected, you must repair the leak or defect according to the requirements of paragraph (e) of this section.

§ 63.7917  What are my inspection and monitoring requirements for transfer systems?

(b) You must demonstrate initial compliance of each individual drain system using controls according to §63.7915(b) if you have submitted as part of your notification of compliance status, specified in §63.7950, a signed statement that you have met the requirements in paragraphs (b)(1) through (3) of this section.

(1) You have installed air emission controls for each individual drain system and junction box according to the requirements in §63.962(a) and (b), and you have records documenting the installation and design.

(2) You will operate the air emission controls according to the requirements in §63.962(b)(5).

(3) You have performed an initial visual inspection of each individual drain system according to the requirements in §63.964(a), and you have records documenting the inspection results.

(c) You must demonstrate initial compliance of each transfer system using covers according to §63.7915(c)(1) if you have submitted as part of your notification of compliance status, specified in §63.7950, a signed statement that you have met the requirements in paragraphs (c)(1) through (3) of this section.

(1) Each transfer system is equipped with covers and closure devices according to the requirements in §63.689(d)(1) through (4), and you have records documenting the design and installation.

(2) You have performed an initial inspection of each cover and its closure devices for defects according to the requirements in §63.695(d)(1) through (5), and you have records documenting the inspection results.

(3) You will operate each cover and its closure devices according to the requirements in §63.689(5).

(d) You must demonstrate initial compliance of each transfer system that consists of hard piping according to §63.7915(c)(2) if you have submitted as part of your notification of compliance status, specified in §63.7950, a signed statement that you have met the requirements in paragraphs (d)(1) and (2) of this section.

(1) You have installed a transfer system that consists entirely of hard piping and meets the requirements in §63.7915(c)(2), and you have records documenting the design and installation.

(2) You have performed an initial inspection of the entire transfer system to verify that all joints or seams between the pipe sections are permanently or semi-permanently sealed (e.g., a welded joint between two sections of metal pipe or a bolted and gasketed flange), and you have records documenting the inspection results.

(e) You must demonstrate initial compliance of each transfer system that is enclosed and vented to a control device according to §63.7915(e)(3) if you have submitted as part of your notification of compliance status, specified in §63.7950, a signed statement that you have met the requirements in paragraphs (e)(1) and (2) of this section.

(1) You have installed a transfer system that is designed and operated such that an internal pressure in the vapor headspace in the enclosure is maintained at a level less than atmospheric pressure when the control device is operating, and you have records documenting the design and installation.

(2) You have met each applicable requirement for demonstrating initial compliance with the emission limitations and work practice standards for a closed vent system and control device in §63.7926.
(d) If you operate a transfer system that is enclosed and vented to a control device according to §63.7915(c)(3), you must meet requirements in paragraphs (d)(1) and (2) of this section.

(1) You must annually inspect all enclosure components (e.g., enclosure sections, closure devices, fans) for defects that would prevent an internal pressure in the vapor headspace in the enclosure from continuously being maintained at a level less than atmospheric pressure when the control device is operating. In the event that a defect is detected, you must repair the defect according to the requirements of paragraph (e) of this section.

(2) You must monitor and inspect the closed vent system and control device according to the requirements in §63.7927 that apply to you.

(e) If you are subject to paragraph (c) or (d) of this section, you must repair all detected defects as specified in paragraphs (e)(1) through (3) of this section.

(1) You must make first efforts at repair of the defect no later than 5 calendar days after detection and repair shall be completed as soon as possible but no later than 45 calendar days after detection except as provided in paragraph (e)(2) of this section.

(2) Repair of a defect may be delayed beyond 45 calendar days if you determine that repair of the defect requires emptying or temporary removal from service of the transfer system and no alternative transfer system is available at the site to accept the material normally handled by the system. In this case, you must repair the defect the next time the process or unit that is generating the material handled by the transfer system stops operation. Repair of the defect must be completed before the process or unit resumes operation.

(3) You must maintain a record of the defect repair according to the requirements specified in §63.7952.

[68 FR 58190, Oct. 8, 2003, as amended at 71 FR 69018, Nov. 29, 2006]

§63.7918 How do I demonstrate continuous compliance with the emissions limitations and work practice standards for transfer systems?

(a) You must demonstrate continuous compliance with the emissions limitations and work practice standards in §63.7915 applicable to your affected transfer system by meeting the requirements in paragraphs (b) through (e) of this section as applicable to your transfer systems.

(b) You must demonstrate continuous compliance for each individual drain system using controls according to §63.7915(b) by meeting the requirements in paragraphs (b)(1) through (5) of this section.

(1) Operating and maintaining the air emission controls for individual drain systems according to §63.962.

(2) Visually inspecting each individual drain system at least annually according to the requirements in §63.964(a).

(3) Repairing defects according to the requirements in §63.964(b).

(4) Recording the information specified in §63.965(a).

(5) Keeping records to document compliance with the requirements of this subpart according to the requirements in §63.7952.

(c) You must demonstrate continuous compliance for each transfer system using covers according to §63.7915(c)(1) by meeting the requirements in paragraphs (c)(1) through (4) of this section.

(1) Operating and maintaining each cover and its closure devices according to the requirements in §63.695(d)(1) through (5).

(2) Performing inspections of each cover and its closure devices for defects at least annually according to the requirements in §63.695(d)(1) through (5).

(3) Repairing defects according to the requirements in §63.695(5)

(4) Keeping records to document compliance with the requirements of this subpart according to the requirements in §63.7952.

(d) You must demonstrate continuous compliance for each transfer system that consists of hard piping according to §63.7915(c)(2) by meeting the requirements in paragraphs (d)(1) through (4) of this section.

(1) Operating and maintaining the pipeline to ensure that all joints or
seams between the pipe sections remain permanently or semi-permanently sealed (e.g., a welded joint between two sections of metal pipe or a bolted and gasketed flange).

(2) Inspecting the pipeline for defects at least annually according to the requirements in §63.7917(c).

(3) Repairing defects according to the requirements in §63.7917(e).

(4) Keeping records to document compliance with the requirements of this subpart according to the requirements in §63.7952.

(e) You must demonstrate continuous compliance for each transfer system that is enclosed and vented to a control device according to §63.7915(c)(3) by meeting the requirements in paragraphs (e)(1) through (5) of this section.

(1) Operating and maintaining the enclosure to ensure that the internal pressure in the vapor headspace in the enclosure is maintained continuously at a level less than atmospheric pressure when the control device is operating.

(2) Inspecting the enclosure and its closure devices for defects at least annually according to the requirements in §63.7918(d).

(3) Repairing defects according to the requirements in §63.7918(e).

(4) Meeting each applicable requirement for demonstrating continuous compliance with the emission limitations and work practice standards for a closed vent system and control device in §63.7928.

(5) Keeping records to document compliance with the requirements according to the requirements in §63.7952.

EQUIPMENT LEAKS

§ 63.7920 What emissions limitations and work practice standards must I meet for equipment leaks?

(a) You must control HAP emissions from each new and existing equipment subject to §63.7887 according to emissions limitations and work practice standards in this section that apply to your affected equipment.

(b) For your affected equipment, you must meet the requirements in either paragraph (b)(1) or (2) of this section.

(1) Control equipment leaks according to all applicable requirements under 40 CFR part 63, subpart TT—National Emission Standards for Equipment Leaks—Control Level 1; or

(2) Control equipment leaks according to all applicable requirements under 40 CFR part 63, subpart UU—National Emission Standards for Equipment Leaks—Control Level 2.

(c) If you use a closed vent system and control device to comply with this section, as an alternative to meeting the standards in §63.1015 or §63.1034 for closed vent systems and control devices, you may elect to meet the requirements in §§63.7925 through 63.7928 that apply to your closed vent system and control device.

(d) As provided in §63.6(g), you may request approval from the EPA to use an alternative to the work practice standards in this section that apply to your equipment. If you request for permission to use an alternative to the work practice standards, you must submit the information described in §63.6(g)(2).

§ 63.7921 How do I demonstrate initial compliance with the emissions limitations and work practice standards for equipment leaks?

(a) You must demonstrate initial compliance with the emissions limitations and work practice standards in §63.7920 that apply to your affected equipment by meeting the requirements in paragraphs (b) and (c) of this section, as applicable to your affected sources.

(b) If you control equipment leaks according to the requirements under §63.7920(b)(1), you must demonstrate initial compliance if you have met the requirements in paragraphs (b)(1) and (2) of this section.

(1) You include the information required in §63.1018(a)(1) in your notification of compliance status report.

(2) You have submitted as part of your notification of compliance status a signed statement that:

(i) You will meet the requirements in §§63.1002 through 63.1016 that apply to your affected equipment.

(ii) You have identified the equipment subject to control according to the requirements in §63.1003, including
equipment designated as unsafe to monitor, and have records supporting the determinations with a written plan for monitoring the equipment according to the requirements in §63.1003(c)(4).

(c) If you control equipment leaks according to the requirements under §63.7920(b)(2), you must demonstrate initial compliance if you have met the requirements in paragraphs (c)(1) and (2) of this section.

(1) You have included the information required in §63.1039(a) in your notification of compliance status report.

(2) You have submitted as part of your notification of compliance status a signed statement that:

(i) You will meet the requirements in §§63.1021 through 63.1037 that apply to your affected equipment.

(ii) You have identified the equipment subject to control according to the requirements in §63.1022, including equipment designated as unsafe to monitor, and have records supporting the determinations with a written plan for monitoring the equipment according to the requirements in §63.1022(c)(4).

§63.7925 How do I demonstrate continuous compliance with the work practice standards for equipment leaks?

(a) You must demonstrate continuous compliance with the emissions limitations and work practice standards in §63.7920 applicable to your affected equipment by meeting the requirements in paragraphs (b) through (d) of this section that apply to you.

(b) If you control equipment leaks according to the requirements under §63.7920(b)(1), you must demonstrate continuous compliance by inspecting, monitoring, repairing, and maintaining records according to the requirements in §§63.1002 through 63.1018 that apply to your affected equipment.

(c) If you control equipment leaks according to the requirements under §63.7920(b)(2), you must demonstrate continuous compliance by inspecting, monitoring, repairing, and maintaining records according to the requirements in §§63.1002 through 63.1018 that apply to your affected equipment.

(d) You must keep records to demonstrate compliance with the requirements according to the requirements in §63.7952.

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?

(a) For each closed-vent system and control device you use to comply with requirements in §§63.7890 through 63.7922, as applicable to your affected sources, you must meet the emissions limitations and work practice standards in this section.

(b) Whenever gases or vapors containing HAP are vented through the closed-vent system to the control device, the control device must be operating except at those times listed in either paragraph (b)(1) or (2) of this section.

(1) The control device may be bypassed for the purpose of performing planned routine maintenance of the closed-vent system or control device in situations when the routine maintenance cannot be performed during periods that the emission point vented to the control device is shutdown. On an annual basis, the total time that the closed-vent system or control device is bypassed to perform routine maintenance must not exceed 240 hours per each calendar year.

(2) The control device may be bypassed for the purpose of correcting a malfunction of the closed-vent system or control device. You must perform the adjustments or repairs necessary to correct the malfunction as soon as practicable after the malfunction is detected.

(c) For each closed vent system, you must meet the work practice standards in §63.693(c).

(d) For each control device other than a flare or a control device used to comply with the facility-wide process vent emission limits in §63.7890(b), you must control HAP emissions to meet either of the emissions limits in paragraphs (d)(1) or (2) of this section except as provided for in paragraph (f) of this section.
(1) Reduce emissions of total HAP listed in Table 1 of this subpart or TOC (minus methane and ethane) from each control device by 95 percent by weight; or
(2) Limit the concentration of total HAP listed in Table 1 of this subpart or TOC (minus methane and ethane) from each combustion control device (a thermal incinerator, catalytic incinerator, boiler, or process heater) to 20 ppmv or less on a dry basis corrected to 3 percent oxygen.
(e) If you use a flare for your control device, then you must meet the requirements for flares in §63.11(b).
(f) If you use a process heater or boiler for your control device, then as alternative to meeting the emissions limits in paragraph (d) of this section you may choose to comply with one of the work practice standards in paragraphs (f)(1) through (3) of this section.
(1) Introduce the vent stream into the flame zone of the boiler or process heater and maintain the conditions in the combustion chamber at a residence time of 0.5 seconds or longer and at a temperature of 760 °C or higher; or
(2) Introduce the vent stream with the fuel that provides the predominate heat input to the boiler or process heater (i.e., the primary fuel); or
(3) Introduce the vent stream to a boiler or process heater for which you either have been issued a final permit under 40 CFR part 270 and complies with the requirements of 40 CFR part 266, subpart H—Hazardous Waste Burned in Boilers and Industrial Furnaces; or has certified compliance with the interim status requirements of 40 CFR part 266, subpart H.
(g) For each control device other than a flare, you must meet each operating limit in paragraphs (g)(1) through (6) of this section that applies to your control device.
(1) If you use a regenerable carbon adsorption system, you must:
(i) Maintain the hourly average total regeneration stream mass flow during the adsorption bed regeneration cycle greater than or equal to the temperature established during the design evaluation or performance test.
(ii) Maintain the hourly average temperature of the adsorption bed after regeneration (and within 15 minutes after completing any cooling cycle) less than or equal to the temperature established during the design evaluation.
(iv) Maintain the frequency of regeneration greater than or equal to the frequency established during the design evaluation.
(2) If you use a nonregenerable carbon adsorption system, you must maintain the hourly average temperature of the adsorption bed less than or equal to the temperature established during the design evaluation or performance test.
(3) If you use a condenser, you must maintain the daily average condenser exit temperature less than or equal to the temperature established during the design evaluation or performance test.
(4) If you use a thermal incinerator, you must maintain the hourly average firebox temperature greater than or equal to the temperature established in the design evaluation or during the performance test.
(5) If you use a catalytic incinerator, you must maintain the daily average temperature difference across the catalyst bed greater than or equal to the minimum temperature difference established during the performance test or design evaluation.
(6) If you use a boiler or process heater to comply with an emission limit in paragraph (d) of this section, you must maintain the daily average firebox temperature within the operating level established during the design evaluation or performance test.
(h) If you use a carbon adsorption system as your control, you must meet each work practice standard in paragraphs (h)(1) through (3) of this section that applies to your control device.
(1) If you use a regenerable carbon adsorption system, you must:
(i) Replace the existing adsorbent in each segment of the bed with an adsorbent that meets the replacement specifications established during the design evaluation before the age of the
adsorbent exceeds the maximum allowable age established during the design evaluation.

(ii) Follow the disposal requirements for spent carbon in §63.693(d)(4).

(2) If you use a nonregenerable carbon adsorption system, you must:

(i) Replace the existing adsorbent in each segment of the bed with an adsorbent that meets the replacement specifications established during the design evaluation before the age of the adsorbent exceeds the maximum allowable age established during the design evaluation.

(ii) Meet the disposal requirements for spent carbon in §63.693(d)(4)(i).

(3) If you use a nonregenerative carbon adsorption system, you may choose to comply with the requirements in paragraphs (h)(3)(i) and (ii) of this section as an alternative to the requirements in paragraph (h)(2) of this section. You must:

(i) Immediately replace the carbon canister or carbon in the control device when the monitoring device indicates breakthrough has occurred according to the requirements in §63.693(d)(4)(iii)(A), or replace the carbon canister or carbon in the control device at regular intervals according to the requirements in §63.693(d)(4)(iii)(B).

(ii) Follow the disposal requirements for spent carbon in §63.693(d)(4)(ii).

(i) If you use a catalytic incinerator, you must replace the existing catalyst bed with a bed that meets the replacement specifications before the age of the bed exceeds the maximum allowable age established in the design evaluation or during the performance test.

(j) As provided in §63.6(g), you may request approval from the EPA to use an alternative to the work practice standards in this section that apply to your closed vent systems and control devices. If you request for permission to use an alternative to the work practice standards, you must submit the information described in §63.6(g)(2).

§63.7926 How do I demonstrate initial compliance with the emission limitations and work practice standards for closed vent systems and control devices?

(a) You must demonstrate initial compliance with the emission limitations and work practice standards in this subpart applicable to your closed vent system and control device by meeting the requirements in paragraphs (b) through (h) of this section that apply to your closed vent system and control device.

(b) You must demonstrate initial compliance with the closed vent system work practice standards in §63.7925(c) if you have submitted as part of your notification of compliance status, specified in §63.7950, a signed statement that you have met the requirements in paragraphs (b)(1) and (2) of this section.

(1) You have installed a closed vent system that meets the requirements in §63.695(c)(1) and (2), and you have records documenting the equipment design and installation.

(2) You have performed the initial inspection of the closed vent system according to the requirements in §63.695(c)(1) or (ii), and you have records documenting the inspection results.

(c) You must demonstrate initial compliance of each control device subject to the emissions limits in §63.7925(d) with the applicable emissions limit in §63.7925(d) if you have submitted as part of your notification of compliance status, specified in §63.7950, a signed statement that you have met the requirements in paragraphs (c)(1) and (2) of this section that apply to you.

(1) For the emissions limit in §63.7925(d)(1), the emissions of total HAP listed in Table 1 of this subpart or TOC (minus methane and ethane) from the control device, measured or determined according to the procedures for performance tests and design evaluations in §63.7941, are reduced by at least 95 percent by weight.

(2) For the emissions limit in §63.7925(d)(2), the concentration of total HAP listed in Table 1 of this subpart or TOC (minus methane and ethane) from the combustion control device, measured by a performance test or determined by a design evaluation according to the procedures in §63.7941, do not exceed 20 ppmv on a dry basis corrected to 3 percent oxygen.

(d) You must demonstrate initial compliance of each control device subject to operating limits in §63.7925(g)
§ 63.7927 What are my inspection and monitoring requirements for closed vent systems and control devices?

(a) You must comply with the requirements in paragraphs (a)(1) and (2) of this section for each closed vent system.

(1) You must monitor and inspect each closed vent system according to the requirements in either paragraph (a)(1)(i) or (ii) of this section.

(i) You must monitor, inspect, and repair defects according to the requirements in §63.695(c)(1)(i) through (c)(3); or

(ii) You must monitor and inspect the closed vent system according to the requirements in §63.172(f) through (j) and record the information in §63.181.

(2) If your closed vent system includes a bypass device, you must meet the requirements in either paragraph (a)(2)(i) or (ii) of this section.

(i) Use a flow indicator to determine if the presence of flow according to the requirements in §63.693(c)(2)(i); or
(ii) Use a seal or locking device and make monthly inspections as required by §63.693(c)(2)(ii).

(b) If you use a regenerable carbon adsorption system, you must meet the requirements in paragraphs (b)(1) through (3) of this section.

(1) Use a continuous parameter monitoring system (CPMS) to measure and record the hourly average total regeneration stream mass flow during each carbon adsorption cycle.

(2) Use a CPMS to measure and record the hourly average temperature of the adsorption bed during regeneration (except during the cooling cycle).

(3) Use a CPMS to measure and record the hourly average temperature of the adsorption bed after regeneration (and within 15 minutes after completing any cooling cycle).

(c) If you use a nonregenerable carbon adsorption system, you must use a CPMS to measure and record the hourly average temperature of the adsorption bed or you must monitor the concentration of organic compounds in the exhaust vent stream according to the requirements in §63.693(d)(4)(iii)(A).

(d) If you use a condenser, you must use a CPMS to measure and record the hourly average condenser exit temperature and determine and record the daily average condenser exit temperature.

(e) If you use a thermal incinerator, you must use a CPMS to measure and record the hourly average firebox temperature.

(f) If you use a catalytic incinerator, you must use a CPMS with two temperature sensors to measure and record the hourly average temperature at the outlet of the catalyst bed, the hourly average temperature difference across the catalyst bed, and to determine and record the daily average temperature difference across the catalyst bed.

(g) If you use a boiler or process heater to meet an emission limitation, you must use a CPMS to measure and record the hourly average firebox temperature and determine and record the daily average firebox temperature.

(h) If you use a flare, you must monitor the operation of the flare using a heat sensing monitoring device according to the requirements in §63.693(b)(3).

(i) If you introduce the vent stream into the flame zone of a boiler or process heater according to the requirements in §63.7925(f)(1), you must use a CPMS to measure and record the combustion zone temperature.

§63.7928 How do I demonstrate continuous compliance with the emissions limitations and work practice standards for closed vent systems and control devices?

(a) You must demonstrate continuous compliance with the emissions limitations and work practice standards in this subpart applicable to your closed vent system and control device by meeting the requirements in paragraphs (b) through (j) of this section as applicable to your closed vent system and control device.

(b) You must demonstrate continuous compliance with the closed vent system work practice standards in §63.7925(c) by meeting the requirements in paragraphs (b)(1) through (7) of this section.

(1) For a closed vent system designed to operate with no detectable organic emissions, visually inspecting the closed vent system at least annually, monitoring after a repair or replacement using the procedures in §63.694(k), and monitoring at least annually according to the requirements in §63.695(c)(1)(ii).

(2) For a closed vent system designed to operate below atmospheric pressure, visually inspecting the closed vent system at least annually according to the requirements in §63.695(c)(2)(ii).

(3) Repairing defects according to the requirements in §63.695(c)(3).

(4) Keeping records of each inspection that include the information in paragraphs (b)(4)(1) through (iii) of this section:

(i) A closed vent system identification number (or other unique identification description you select).

(ii) Date of each inspection.

(iii) If a defect is detected during an inspection, the location of the defect, a description of the defect, the date of detection, the corrective action taken.
to repair the defect, and if repair is delayed, the reason for any delay and the date completion of the repair is expected.

(5) If you elect to monitor the closed vent system according to the requirements in §63.172(f) through (j), recording the information in §63.181.

(6) If the closed vent system is equipped with a flow indicator, recording the information in §63.693(c)(2)(i).

(7) If the closed vent system is equipped with a seal or locking device, visually inspecting the seal or closure mechanism at least monthly according to the requirements in §63.693(c)(2)(ii), and recording the results of each inspection.

(c) You must demonstrate continuous compliance of each control device subject to the emissions limits in §63.7925(d) with the applicable emissions limit in §63.7925(d) by meeting the requirements in paragraph (c)(1) or (2) of this section.

(1) For the emission limit in §63.7925(d)(1), maintaining the reduction in emissions of total HAP listed in Table 1 of this subpart or TOC (minus methane and ethane) from the control device at 95 percent by weight or greater.

(2) For the emission limit in §63.7925(d)(2), maintaining the concentration of total HAP listed in Table 1 of this subpart or TOC (minus methane and ethane) from the control device at 20 ppmv or less.

(d) You must demonstrate continuous compliance of each control device subject to operating limits in §63.7925(g) with the applicable limits by meeting the requirements in paragraphs (d)(1) through (4) of this section.

(1) Maintaining each operating limit according to the requirements in §63.7925(g) as applicable to the control device.

(2) Monitoring and inspecting each control device according to the requirements in §63.7927(b) through (i) as applicable to the control device.

(3) Operating and maintaining each continuous monitoring system according to the requirements in §63.7945, and collecting and reducing data according to the requirements in §63.7946.

(4) Keeping records to document compliance with the requirements of this subpart according to the requirements in §63.7952.

(e) You must demonstrate continuous compliance with the spent carbon replacement and disposal work practice standards for regenerable carbon adsorption systems in §63.7925(h)(1) by meeting the requirements in paragraph (e)(1) through (3) of this section.

(1) Replacing the adsorbent as required by §63.7925(h)(1)(i).

(2) Following the disposal requirements for spent carbon in §63.693(d)(4)(ii).

(3) Keeping records to document compliance with the requirements of the work practice standards.

(f) You must demonstrate continuous compliance with the spent carbon replacement and disposal work practice standards for nonregenerable carbon adsorption systems in §63.7925(h)(2) by meeting the requirements in paragraphs (f)(1) through (3) of this section.

(1) Replacing the adsorbent as required by the work practice standard in §63.7925(h)(2)(i).

(2) Following the disposal requirements for spent carbon in §63.693(d)(4)(ii).

(3) Keeping records to document compliance with the requirements of the work practice standards.

(g) You must demonstrate continuous compliance with the spent carbon replacement and disposal work practice standards for nonregenerable carbon adsorption systems in §63.7925(h)(3) by meeting the requirements in paragraphs (g)(1) through (3) of this section.

(1) Monitoring the concentration level of the organic compounds in the exhaust vent for the carbon adsorption system as required in §63.7927(c), immediately replacing the carbon canister or carbon in the control device when breakthrough is indicated by the monitoring device, and recording the date of breakthrough and carbon replacement. Or, you must replace the carbon canister or carbon in the control device at regular intervals and record the date of carbon replacement.

(2) Following the disposal requirements for spent carbon in §63.693(d)(4)(ii).

(3) Keeping records to document compliance with the requirements of the work practice standards.
§ 63.7935 What are my general requirements for complying with this subpart?

(a) You must be in compliance with the emissions limitations (including operating limits) and the work practice standards in this subpart at all times, except during periods of startup, shutdown, and malfunction.

(b) You must always operate and maintain your affected source, including air pollution control and monitoring equipment, according to the provisions in §63.6(e)(1)(i).

(c) You must develop a written startup, shutdown, and malfunction plan (SSMP) according to the provisions in §63.6(e)(3).

(d) [Reserved]

(e) You must report each instance in which you did not meet each emissions limitation and each operating limit.

(h) You must demonstrate continuous compliance with the catalyst replacement work practice standards for catalytic incinerators in §63.7925(i) by meeting the requirements in paragraphs (h)(1) and (2) of this section.

(1) Replacing the existing catalyst bed as required in §63.7925(i).

(2) Keeping records to document compliance with the requirements of the work practice standards.

(i) You must demonstrate continuous compliance of each flare with the work practice standards in §63.7925(e) by meeting the requirements in paragraphs (i)(1) through (5) of this section.

(1) Operating the flare with no visible emissions except for up to 5 minutes in any 2 consecutive hours according to the requirements in §63.11(b)(4).

(2) Monitoring the presence of a pilot flame according to the requirements in §63.7927(h) and maintaining a pilot flame and flare flame at all times that emissions are not vented to the flare according to the requirements in §63.11(b)(5).

(3) Operating the flare with an exit velocity according to the requirements in §63.11(b)(6) through (8).

(4) Operating the flare with a net heating value of the gas being combusted according to the requirements in §63.11(b)(6)(ii).

(5) Keeping records to document compliance with the requirements of the work practice standards.

(j) You must demonstrate continuous compliance of each boiler or process heater with the work practice standards in §63.7925(f) by meeting the requirements in paragraphs (j)(1) through (3) of this section.

(1) For the work practice standards in §63.7925(f)(1), you must demonstrate continuous compliance by meeting the requirements in paragraphs (j)(1)(i) through (4).

(i) Maintaining conditions in the combustion chamber at a residence time of 0.5 seconds or longer and at a combustion zone temperature at 760 °C or greater whenever the vent stream is introduced to the flame zone of the boiler or process heater.

(ii) Monitoring each boiler or process heater according to the requirements in §63.7927(i).

(ii) Operating and maintaining each continuous monitoring system according to the requirements in §63.7945, and collecting and reducing data according to the requirements in §63.7946.

(iv) Keeping records to document compliance with residence time design requirement.

(2) For the work practice standards in §63.7925(f)(2), you maintain the boiler or process heater operations such that the vent stream is introduced with the fuel according to the requirements in §63.693(g)(1)(iv), or that the vent stream is introduced to a boiler or process heater that meets the requirements in §63.693(g)(1)(v).

(3) For the work practice standard in §63.7925(f)(3), you remain in compliance with all terms and conditions of the final permit under 40 CFR part 270 and your boiler or process heater complies with the requirements of 40 CFR part 266, subpart H—Hazardous Waste Burned in Boilers and Industrial Furnaces; or in compliance with the interim status requirements of 40 CFR part 266, subpart H, as applicable to your boiler or process heater.

[68 FR 58190, Oct. 8, 2003, as amended at 71 FR 69018, Nov. 29, 2006]
§ 63.7936 What requirements must I meet if I transfer remediation material off-site to another facility?

(a) If you transfer to another facility a remediation material generated by your remediation activities and having an average total VOHAP concentration equal to or greater than 10 ppmv (as determined using the procedures specified in §63.7943), then you must transfer the remediation material to a facility that meets the requirements in paragraph (b) of this section. You must record the name, street address, and telephone number of the facility where you send this remediation material.

(b) You may elect to transfer the remediation material to one of the following facilities:

1. A facility where your remediation material will be directly disposed in a landfill or other land disposal unit according to all applicable Federal and State requirements.

2. A facility subject to 40 CFR part 63, subpart DD where the exemption under §63.680(b)(2)(iii) is waived and air emissions from the management of your remediation material at the facility are controlled according to all applicable requirements in the subpart for an off-site material. Prior to sending your remediation material, you must obtain a written statement from the owner or operator of the facility to which you send your remediation material acknowledging that the exemption under §63.680(b)(2)(iii) will be waived for all remediation material received at the facility from you and your material will be managed as an off-site material at the facility according to all applicable requirements. This statement must be signed by the responsible official of the receiving facility, provide the name and address of the receiving facility, and a copy sent...
§ 63.7937 How do I demonstrate initial compliance with the general standards?

(a) You must demonstrate initial compliance with the general standards in §63.7884 through 63.7887 that apply to your affected sources by meeting the requirements in paragraphs (b) through (d) of this section, as applicable to you.

(b) You must demonstrate initial compliance with the general standards in §63.7885 that apply to your affected process vents by meeting the requirements in paragraphs (b)(1) through (4) of this section, as applicable to your process vents.

(1) If HAP emissions are controlled from the affected process vents according to the emission limitations and work practice standards specified in §63.7885(b)(1), you have met the initial compliance requirements in §63.7891.

(2) If the remediation material treated or managed by the process vented through the affected process vents has an average total VOHAP less than 10 ppmw according to §63.7885(b)(2), you have submitted as part of your notification of compliance status, specified in §63.7950, a signed statement that you have determined, according to the procedures §63.7943, and recorded the average VOHAP concentration of the remediation material placed in the affected remediation material management unit.

(3) If HAP emissions are controlled from the affected process vents to meet standards in another subpart under 40 CFR part 61 or 40 CFR part 63 according to §63.7885(b)(3), you have submitted as part of your notification of compliance status, specified in §63.7950, a signed statement that you have met

to the appropriate EPA Regional Office at the addresses listed in 40 CFR 63.13.

(3) A facility where your remediation material will be managed according to all applicable requirements under this Subpart.

(i) You must prepare and include a notice with each shipment or transport of remediation material from your site. This notice must state that the remediation material contains organic HAP that are to be treated according to the provisions of this subpart. When the transport is continuous or ongoing (for example, discharge to a publicly owned treatment works), the notice must be submitted to the receiving facility owner or operator initially and whenever there is a change in the required treatment.

(ii) You may not transfer the remediation material unless the owner or operator of the facility receiving your remediation material has submitted to the EPA a written certification that he or she will manage remediation material received from you according to the requirements of §§63.7885 through 63.7957. The receiving facility owner or operator may revoke the written certification by sending a written statement to the EPA and to you providing at least 90 days notice that they rescind acceptance of responsibility for compliance with the regulatory provisions listed in this section. Upon expiration of the notice period, you may not transfer your remediation material to the facility.

(iii) By providing the written certification to the EPA, the receiving facility owner or operator accepts responsibility for compliance with the regulatory provisions listed in paragraph (b)(3) of this section with respect to any shipment of remediation material covered by the written certification. Failure to abide by any of those provisions with respect to such shipments may result in enforcement action by the EPA against the certifying entity according to the enforcement provisions applicable to violations of these provisions by owners or operators of sources.

(iv) Written certifications and revocation statements to the EPA from the receiving facility owner or operator must be signed by the responsible official of the receiving facility, provide the name and address of the receiving facility, and a copy sent to the appropriate EPA Regional Office at the addresses listed in 40 CFR 63.13. Such written certifications are not transferable.

(c) Acceptance by a facility owner or operator of remediation material from a site remediation subject to this Subpart does not, by itself, require the facility owner or operator to obtain a title V permit under 40 CFR 70.3 or 40 CFR 71.3.
the requirements in paragraphs (b)(3)(i) and (ii) of this section.

(i) You include in your statement the citations for the specific emission limitations and work practice standards that apply to the process vents under the subpart in 40 CFR part 61 or 40 CFR part 63 that the vents are also subject.

(ii) You are complying with all applicable emissions limitations and work practice standards specified by the applicable subpart.

(4) For each process vent exempted according to §63.7885(c), you have submitted as part of your notification of compliance status, specified in §63.7950, a signed statement that you have met the requirements in paragraphs (b)(4)(i) and (ii) of this section.

(i) You identify in your statement each process vent that qualifies for an exemption and the exemption conditions in §63.7885(c)(1)(i) or (ii) that apply to each exempted process vent.

(ii) You have performed the measurements and prepared the documentation required in §63.7885(c)(2) that demonstrates that each exempted process vent stream meets the applicable exemption conditions in §63.7885(c)(1).

(c) You must demonstrate initial compliance with the general standards in §63.7886 that apply to your affected remediation material management units by meeting the requirements in paragraphs (c)(1) through (6) of this section, as applicable to your remediation material management units.

(1) If the remediation material management unit uses air pollution controls according to the standards specified in §63.7886(b)(1), you have met the initial compliance requirements applicable to the remediation material management unit in §§63.7896, 63.7901, 63.7906, 63.7911, or 63.7816.

(2) If the remediation material managed in the affected remediation material management unit has an average total VOC concentration less than 500 ppmw according to §63.7886(b)(2), you have submitted as part of your notification of compliance status, specified in §63.7950, a signed statement that you have met the requirements in paragraphs (c)(5)(i) and (ii) of this section.

(3) If HAP emissions are controlled from the affected remediation material management units to meet standards in another subpart under 40 CFR part 61 or 40 CFR part 63 according to §63.7886(b)(3), you have submitted as part of your notification of compliance status, specified in §63.7950, a signed statement that you have met the requirements in paragraphs (c)(3)(i) and (ii) of this section.

(i) You include in your statement the citations for the specific emission limitations and work practice standards that apply to the remediation material management units under the subpart in 40 CFR part 61 or 40 CFR part 63 that the units are also subject.

(ii) You are complying with all applicable emissions limitations and work practice standards specified by the applicable subpart.

(4) If HAP emissions are controlled from the affected remediation material management unit that is an open tank or surface impoundment used for a biological treatment process according to §63.7886(b)(4), you have submitted as part of your notification of compliance status, specified in §63.7950, a signed statement that you have met the requirements in paragraphs (c)(4)(i) and (ii) of this section.

(i) You have performed the measurements and prepared the documentation required in §63.7886(b)(4)(i) that demonstrates that each unit meets the applicable performance levels.

(ii) You will monitor the biological treatment process conducted in each unit according to the requirements in §63.7886(e)(4).

(5) For each remediation material management unit used for cleanup of radioactive mixed waste and exempted according to §63.7886(c), you have submitted as part of your notification of compliance status, specified in §63.7950, a signed statement that you have met the requirements in paragraphs (c)(5)(i) and (ii) of this section.

(i) You include in your statement the citations for the specific requirements that apply to the remediation material management units under regulations, directives, and other requirements
Environmental Protection Agency § 63.7938

under the Atomic Energy Act, the Nuclear Waste Policy Act, or the Waste Isolation Pilot Plant Land Withdrawal Act.

(ii) You are complying with all requirements that apply to the remediation material management units under the applicable regulations or directives.

(6) For each remediation material management unit exempted according to §63.7886(d), you have submitted as part of your notification of compliance status, specified in §63.7950, a signed statement that you have met the requirements in paragraphs (c)(6)(i) and (ii) of this section.

(i) You have designated according to the requirements in §63.7886(d)(1) each of the remediation material management units you are selecting to be exempted.

(ii) You have performed an initial determination and prepared the documentation required in §63.7886(d)(2) that demonstrates that the total annual HAP quantity (based on the HAP listed in Table 1 of this subpart) in the remediation material placed in all of the designated exempted remediation material management units will be less than 1 Mg/yr.

(d) You must demonstrate initial compliance with the general standards in §63.7887 that apply to your affected equipment leak sources by meeting the requirements in §63.7921.

§63.7938 How do I demonstrate continuous compliance with the general standards?

(a) You must demonstrate continuous compliance with the general standards in §§63.7884 through 63.7887 that apply to your affected sources by meeting the requirements in paragraphs (b) through (d) of this section, as applicable to you.

(b) You have demonstrated continuous compliance with the general standards in §63.7885 that apply to your affected process vents by meeting the requirements in paragraphs (b)(1) through (4) of this section, as applicable to your process vents.

(c) You must demonstrate continuous compliance with the general standards in §63.7886 that apply to your affected remediation material management units by meeting the requirements in paragraphs (c)(1) through (6) of this section, as applicable to your remediation material management units.

(1) If the remediation material management unit uses air pollution controls according to the standards specified in §63.7886(b)(1), you must demonstrate continuous compliance by meeting the requirements applicable to the remediation material management unit in §§63.7898, 63.7903, 63.7906, 63.7913, or 63.7818.

(2) If the remediation material management unit has an average total VOHAP concentration less than 10 ppmw according to §63.7885(c)(1), you must demonstrate continuous compliance by performing a new determination and preparing new documentation as required in §63.7885(c)(2) to show that the total VOHAP concentration of the remediation material remains less than 10 ppmw.

(3) If HAP emissions are controlled from the affected process vents to meet standards in another subpart under 40 CFR part 61 or 40 CFR part 63 according to §63.7885(b)(3), you must demonstrate continuous compliance by complying with all applicable emissions limitations and work practice standards specified by the applicable subpart.

(4) For each process vent exempted according to §63.7885(c), you must demonstrate continuous compliance by performing new measurements and preparing new documentation as required in §63.7885(c)(2) that demonstrates that each exempted process vent stream meets the applicable exemption conditions in §63.7885(c)(1).

(c) You must demonstrate continuous compliance with the general standards in §63.7887 that apply to your affected remediation material management units by meeting the requirements in §63.7886 that apply to your affected remediation material management units by meeting the requirements in paragraphs (c)(1) through (6) of this section, as applicable to your remediation material management units.

(1) If the remediation material management unit uses air pollution controls according to the standards specified in §63.7886(b)(1), you must demonstrate continuous compliance by meeting the requirements applicable to the remediation material management unit in §§63.7898, 63.7903, 63.7906, 63.7913, or 63.7818.

(2) If the remediation material management unit has an average total VOHAP concentration less than 10 ppmw according to §63.7885(b)(2), you
§ 63.7940 40 CFR Ch. I (7–1–16 Edition)

must demonstrate continuous compliance by performing a new determination and preparing new documentation as required in §63.7886(c)(2) to show that the total VOHAP concentration of the remediation material remains less than 500 ppmw.

(3) If HAP emissions are controlled from the affected remediation material management units to meet standards in another subpart under 40 CFR part 61 or 40 CFR part 63 according to §63.7886(b)(3), you must demonstrate continuous compliance by meeting all applicable emissions limitations and work practice standards specified by the applicable subpart.

(4) If HAP emissions are controlled from the affected remediation material management unit that is an open tank or surface impoundment used for a biological treatment process according to §63.7886(b)(4), you must demonstrate continuous compliance by meeting the requirements in paragraphs (c)(4)(i) and (ii) of this section.

(i) Performing new measurements and preparing new documentation as required in §63.7886(4)(i) that demonstrates that each unit meets the applicable performance levels.

(ii) Monitoring the biological treatment process conducted in each unit according to the requirements in §63.7886(4)(i).

(5) For each remediation material management unit used for cleanup of radioactive mixed waste and exempted according to §63.7886(d), you must demonstrate continuous compliance by meeting all requirements that apply to the remediation material management units under the applicable regulations or directives.

(6) For each remediation material management unit exempted according to §63.7886(d), you must demonstrate continuous compliance by performing new measurements and preparing new documentation as required in §63.7886(d)(2) to show that the total annual HAP quantity (based on the HAP listed in Table 1 of this subpart) in the remediation material placed in all of the designated exempted remediation material management units remains less than 1 Mg/yr.

(d) You have demonstrated continuous compliance with the general standards in §63.7887 that apply to your affected equipment leak sources by meeting the requirements in §63.7923.

[68 FR 58190, Oct. 8, 2003, as amended at 71 FR 69018, Nov. 29, 2006]

PERFORMANCE TESTS

§ 63.7940  By what date must I conduct performance tests or other initial compliance demonstrations?

(a) You must conduct a performance test or design evaluation for each existing affected source within 180 calendar days after the compliance date that is specified in §63.7883.

(b) For each work practice standard that applies to you where initial compliance is not demonstrated using a performance test or design evaluation, you must demonstrate initial compliance within 30 calendar days after the compliance date that is specified in §63.7883 for your affected source.

(c) For new sources, you must conduct initial performance tests and other initial compliance demonstrations according to the provisions in §63.7(a)(2).

[68 FR 58190, Oct. 8, 2003, as amended at 71 FR 69019, Nov. 29, 2006]

§ 63.7941 How do I conduct a performance test, design evaluation, or other type of initial compliance demonstration?

(a) You must conduct a performance test or design evaluation to demonstrate initial compliance for each new or existing affected source that is subject to an emission limit in this subpart. You must report the results of the performance test or design evaluation according to the requirements in §63.7920(e)(1).

(b) If you choose to conduct a performance test to demonstrate initial compliance, you must conduct the test according to the requirements in §63.7(e)(1) and paragraphs (b) (1) through (5) of this section.

(1) 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.
(2) You may not conduct performance tests during periods of startup, shutdown, or malfunction, as specified in §63.7(e)(1).

(3) You must conduct each performance test using the test methods and procedures in §63.694(1).

(4) Follow the procedures in paragraphs (b)(4)(i) through (iii) of this section to determine compliance with the facility-wide total organic mass emissions rate in §63.7890(a)(1)(i).

(1) Determine compliance with the total organic mass flow rate using Equation 1 of this section as follows:

\[ E_h = (0.0416 \times 10^{-6}) Q_{sd} \sum_{i=1}^{n} (C_i \times MW_i) \] (Eq. 1)

Where:
- \(E_h\) = Total organic mass flow rate, kg/h;
- \(Q_{sd}\) = Volumetric flow rate of gases entering or exiting control device (or exiting the process vent if no control device is used), as determined by Method 2 of 40 CFR part 60, appendix A, dscm/h;
- \(n\) = Number of organic compounds in the vent gas;
- \(C_i\) = Organic concentration in ppm, dry basis, of compound \(i\) in the vent gas, as determined by Method 18 of 40 CFR part 60, appendix A;
- \(MW_i\) = Molecular weight of organic compound \(i\) in the vent gas, kg/kg-mol;

(ii) Determine compliance with the annual total organic emissions rate using Equation 2 of this section as follows:

\[ E_A = E_h \times H \] (Eq. 2)

Where:
- \(E_A\) = Total organic mass emissions rate, kilograms per year;
- \(E_h\) = Total organic mass flow rate for the process vent, kg/h;
- \(H\) = Total annual hours of operation for the affected unit, h.

(iii) Determine compliance with the total organic emissions limit from all affected process vents at the facility by summing the total hourly organic mass emissions rates (\(E_h\) as determined in Equation 1 of this section) and summing the total annual organic mass emissions rates (\(E_A\), as determined in Equation 2 of this section) for all affected process vents at the facility.

(5) Determine compliance with the 95 percent reduction limit in §63.7890(a)(2)(i) for the combination of all affected process vents at the facility using Equations 3 and 4 of this section to calculate control device inlet and outlet concentrations and Equation 5 of this section to calculate control device emission reductions for process vents as follows:

\[ E_i = K_2 \left( \sum_{j=1}^{n} C_{ij} M_{ij} \right) Q_i \] (Eq. 3)

\[ E_o = K_2 \left( \sum_{j=1}^{n} C_{oj} M_{oj} \right) Q_o \] (Eq. 4)

Where:
- \(C_{ij}\), \(C_{oj}\) = Concentration of sample component \(j\) of the gas stream at the inlet and outlet of the control device, dry basis, parts per million by volume. For uncontrolled vents, \(C_{ij} = C_{oj}\) and equal the concentration exiting the vent;
- \(E_i\), \(E_o\) = Mass rate of total organic compounds (TOC) (minus methane and ethane) or total HAP, from Table 1 of this subpart, at the inlet and outlet of the control device, respectively, dry basis, kilogram per hour. For uncontrolled vents, \(E_i = E_o\) and equal the concentration exiting the vent;
- \(M_{ij}\), \(M_{oj}\) = Molecular weight of sample component \(j\) of the gas stream at the inlet and outlet of the control device, respectively, gram/gram-mole. For uncontrolled vents, \(M_{ij} = M_{oj}\) and equal the gas stream molecular weight exiting the vent;
- \(Q_i\), \(Q_o\) = Flowrate of gas stream at the inlet and outlet of the control device, respectively, dry standard cubic meters per minute (dscm/min). For uncontrolled vents, \(Q_i = Q_o\) and equals the flowrate exiting the vent;
- \(K_2\) = Constant, \(2.494 \times 10^{-6}\) (parts per million)\(^{-1}\) (gram-mole per standard cubic meter) (kilogram/gram)/minute/hour, where standard temperature (gram-mole per standard cubic meter) is 20 °C;
- \(n\) = the number of components in the sample.
\[
R_v = \frac{\sum_{j=1}^{n} E_i - \sum_{j=1}^{n} E_o}{\sum_{j=1}^{n} E_i} \times 100 \quad (\text{Eq. 5})
\]

Where:
- \(R_v\) = Overall emissions reduction for all affected process vents, percent
- \(E_i\) = Mass rate of TOC (minus methane and ethane) or total HAP, from Table 1 of this subpart, at the inlet to the control device, or exiting the vent for uncontrolled vents, as calculated in this section, kilograms TOC per hour or kilograms HAP per hour;
- \(E_o\) = Mass rate of TOC (minus methane and ethane) or total HAP, from Table 1 of this subpart, at the outlet to the control device, or exiting the vent for uncontrolled vents, as calculated in this section, kilograms TOC per hour or kilograms HAP per hour. For vents without a control device, \(E_o = E_i\);
- \(n\) = number of affected source process vents.

(c) If you use a carbon adsorption system, condenser, vapor incinerator, boiler, or process heater to meet an emission limit in this subpart, you may choose to perform a design evaluation to demonstrate initial compliance instead of a performance test. You must perform a design evaluation according to the general requirements in §63.693(b)(8) and the specific requirements in §63.693(d)(2)(ii) for a carbon adsorption system (including establishing carbon replacement schedules and associated requirements), §63.693(c)(2)(ii) for a condenser, §63.693(f)(2)(ii) for a vapor incinerator, or §63.693(g)(2)(i)(B) for a boiler or process heater.

(d) During the performance test or design evaluation, you must collect the appropriate operating parameter monitoring system data, average the operating parameter data over each test run, and set operating limits, whether a minimum or maximum value, based on the average of values for each of the three test runs. If you use a control device design analysis to demonstrate control device performance, then the minimum or maximum operating parameter value must be established based on the control device design analysis and supplemented, as necessary, by the control device manufacturer recommendations or other applicable information.

(e) If you control air emissions from an affected source by introducing the vent stream into the flame zone of a boiler or process heater according to the requirements in §63.693(g)(1)(iii), you must conduct a performance test or design evaluation to demonstrate that the boiler or process heater meets the applicable emission limit while operating at a residence time of 0.5 seconds or greater and at a combustion zone temperature of 760 °C or higher.

(f) You must conduct a performance evaluation for each continuous monitoring system according to the requirements in §63.8(e).

(g) If you are required to conduct a visual inspection of an affected source, you must conduct the inspection according to the procedures in §63.906(a)(1) for Tank Level 1 controls, §63.1063(d) for Tank Level 2 controls, §63.926(a) for Container Level 1 controls, §63.946(a) for a surface impoundment equipped with a floating membrane cover, §63.946(b) for a surface impoundment equipped with a cover and vented to a control device, §63.1047(a) for a separator with a fixed roof, §63.1047(c) for a separator equipped with a fixed roof and vented to a control device, §63.693(c)(1)(i) or (c)(2)(i) for a closed vent system, and §63.964(a) for individual drain systems.

(h) [Reserved]

(i) If you use Container Level 2 controls, you must conduct a test to demonstrate that the container operates with no detectable organic emissions or that the container is vapor-tight. You must conduct the test using Method 21 (40 CFR part 60, appendix A) and the procedures in §63.925(a) to demonstrate that the container operates with no detectable organic emissions or Method 27 (40 CFR part 60, appendix A) and the procedures in §63.925(b) to demonstrate that the container is vapor-tight.

(j) If you locate an affected source inside a permanent total enclosure that is vented to a control device, you must demonstrate that the enclosure meets the verification criteria in section 5 of Procedure T in 40 CFR 52.741, appendix B.
(k) If you use a fixed roof or a floating roof to control air emissions from a separator, you must conduct a test to demonstrate that the roof operates with no detectable organic emissions using Method 21 (40 CFR part 60, appendix A) and the procedures in §63.1046(a). If you use a floating roof, you also must measure the seal gaps according to the procedures in §63.1046(b).

(l) If you use a flare to control air emissions, you must conduct a visible emissions test using Method 22 in 40 CFR part 60, appendix A, and the procedures in §63.11(b)(4).

(m) For each initial compliance demonstration that requires a performance test or design evaluation, you must report the results in your notification of compliance status according to the requirements in §63.7950(e)(1). For each initial compliance demonstration that does not require a performance test or design evaluation, you must submit a notification of compliance status according to the requirements in §63.7950(e)(2).

§63.7942 When must I conduct subsequent performance tests?

For non-flare control devices, you must conduct performance tests at any time the EPA requires you to according to §63.7(3).

§63.7943 How do I determine the average VOHAP concentration of my remediation material?

(a) General requirements. You must determine the average total VOHAP concentration of a remediation material using either direct measurement as specified in paragraph (b) of this section or by knowledge as specified in paragraph (c) of this section. These methods may be used to determine the average VOHAP concentration of any material listed in (a)(1) through (3) of this section.

1. A single remediation material stream; or

2. Two or more remediation material streams that are combined prior to, or within, a remediation material management unit or treatment process; or

3. Remediation material that is combined with one or more non-remediation material streams prior to, or within, a remediation material management unit or treatment process.

(b) Direct measurement. To determine the average total VOHAP concentration of a remediation material using direct measurement, you must use the procedures in paragraphs (b)(1) through (3) of this section.

1. Sampling. Samples of each material stream must be collected from the container, pipeline, or other device used to deliver each material stream prior to entering the remediation material management unit or treatment process in a manner such that volatilization of organics contained in the sample is minimized and an adequately representative sample is collected and maintained for analysis by the selected method.

2. The averaging period to be used for determining the average total VOHAP concentration for the material stream on a mass-weighted average basis must be designated and recorded. The averaging period can represent any time interval that you determine is appropriate for the material stream but must not exceed 1 year. For streams that are combined, an averaging period representative for all streams must be selected.

3. No less than four samples must be collected to represent the complete range of HAP compositions and HAP quantities that occur in each material stream during the entire averaging period due to normal variations in the material stream(s). Examples of such normal variations are variation of the HAP concentration within a contamination area.

4. All samples must be collected and handled according to written procedures you prepare and document in a site sampling plan. This plan must describe the procedure by which representative samples of the material stream(s) are collected such that a minimum loss of organics occurs throughout the sample collection and handling process and by which sample integrity is maintained. A copy of the written sampling plan must be maintained on site in the facility operating records. An example of an acceptable
§ 63.7944 How do I determine the maximum HAP vapor pressure of my remediation material?

(a) You must determine the maximum HAP vapor pressure of your remediation material using either direct measurement as specified in paragraph (b) of this section or by knowledge as specified in paragraph (c) of this section.

(b) You may use the procedures in paragraphs (c)(1) through (3) of this section.

(c) Knowledge of the material. To determine the average total VOHAP concentration of a remediation material using knowledge, you must use the procedures in paragraphs (c)(1) through (3) of this section.

(1) Documentation must be prepared that presents the information used as the basis for your knowledge of the material stream’s average VOHAP concentration. Examples of information that may be used as the basis for knowledge include: material balances for the source(s) generating each material stream; species-specific chemical test data for the material stream from previous testing that are still applicable to the current material stream; test data for material from the contamination area(s) being remediated.

(2) If test data are used as the basis for knowledge, then you must document the test method, sampling protocol, and the means by which sampling variability and analytical variability are accounted for in the determination of the average VOHAP concentration. For example, you may use HAP concentration test data for the material stream that are validated according to Method 301 in 40 CFR part 60, appendix A as the basis for knowledge of the material. This information must be provided for each material stream where streams are combined.

(3) If you use species-specific chemical concentration test data as the basis for knowledge of the material, you may adjust the test data to the corresponding average VOHAP concentration value which would be obtained had the material samples been analyzed using Method 305. To adjust these data, the measured concentration for each individual HAP chemical species contained in the material is multiplied by the appropriate species-specific adjustment factor ($f_{m305}$) listed in Table 1 of this subpart.

(d) In the event that you and us disagree on a determination using knowledge of the average total VOHAP concentration for a remediation material, then the results from a determination of VOHAP concentration using direct measurement by Method 305 in 40 CFR part 60 appendix A, as specified in paragraph (b) of this section, will be used to determine compliance with the applicable requirements of this subpart. We may perform or request that you perform this determination using direct measurement.

[68 FR 58190, Oct. 8, 2003, as amended at 71 FR 69019, Nov. 29, 2006]
§ 63.7946 How do I monitor and collect data to demonstrate continuous compliance?

(a) You must monitor and collect data according to this section and your site-specific monitoring plan required in §63.7935.

(b) Except for monitor malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks, and

(c) Use of knowledge to determine the maximum HAP vapor pressure. Documentation must be prepared and recorded that presents the information used as the basis for your knowledge that the maximum HAP vapor pressure of the remediation material is less than the maximum vapor pressure limit listed in Table 2 of this subpart for the applicable tank design capacity category.

(d) In the event that you and us disagree on a determination using knowledge of the maximum HAP vapor pressure of the remediation material, then the results from a determination of
§ 63.7947 What are my monitoring alternatives?

(a) As an alternative to the parametric monitoring required in this subpart, you may install, calibrate, and operate a continuous emission monitoring system (CEMS) to measure the control device outlet total organic emissions or organic HAP emissions concentration.

(1) The CEMS used on combustion control devices must include a diluent gas monitoring system (for O₂ or CO₂) with the pollutant monitoring system in order to correct for dilution (e.g., to 0 percent excess air).

(2) Each CEMS must complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive 15-minute period. Data must be reduced as specified in §63.8(g)(2).

(3) You must conduct a performance evaluation of the CEMS according to the requirements in §63.8 and Performance Specification 8 (for a total organic emissions CEMS) or Performance Specification 9 (for a HAP emissions CEMS) and Performance Specification 3 (for an O₂ or CO₂ CEMS) of 40 CFR part 60, appendix B. The relative accuracy provision of Performance Specification 8, sections 2.4 and 3 need not be conducted.

(4) You must prepare a site-specific monitoring plan for operating, calibrating, and verifying the operation of your CEMS according to the requirements in §§63.8(c), (d), and (e).

(5) You must establish the emissions concentration operating limit according to paragraphs (a)(5)(i) and (ii) of this section.

(i) During the performance test, you must monitor and record the total organic or HAP emissions concentration at least once every 15 minutes during each of the three test runs.

(ii) Use the data collected during the performance test to calculate and record the average total organic or HAP emissions concentration maintained during the performance test. The average total organic or HAP emissions concentration, corrected for dilution as appropriate, is the maximum operating limit for your control device.

(b) You must maintain the daily (24-hour) average total organic or HAP emissions concentration in the exhaust vent stream of the control device outlet less than or equal to the site-specific operating limit established during the performance test.

NOTIFICATION, REPORTS, AND RECORDS

§ 63.7950 What notifications must I submit and when?

(a) You must submit all of the notifications in §§63.7(b) and (c), 63.8(e), 63.8(f)(4) and (6), and 63.9(b) through (h) that apply to you.

(b) As specified in §63.9(b)(2), if you start up your affected source before October 8, 2003, you must submit an Initial Notification not later than 120 calendar days after October 8, 2003.

(c) As specified in §63.9(b)(3), if you start up your new or reconstructed affected source on or after the effective date, you must submit an Initial Notification no later than 120 calendar days after initial startup.

(d) If you are required to conduct a performance test, you must submit a notification of intent to conduct a performance test at least 60 calendar days before the performance test is scheduled to begin as required in §63.7(b)(1).

(e) If you are required to conduct a performance test, design evaluation, or other initial compliance demonstration, you must submit a Notification of Compliance Status according to §63.9(b)(2)(ii).
(1) For each initial compliance demonstration that includes a performance test or design evaluation, you must submit the Notification of Compliance Status, including the performance test results, before the close of business on the 60th calendar day following the completion of the performance test according to §63.10(d)(2). You must submit the complete design evaluation and supporting documentation.

(2) For each initial compliance demonstration that does not include a performance test, you must submit the Notification of Compliance Status before the close of business on the 30th calendar day following the completion of the initial compliance demonstration.

(f) You must provide written notification to the Administrator of the alternative standard selected under §63.1006(b)(5) or (6) before implementing either of the provisions.

§ 63.7951 What reports must I submit and when?

(a) Compliance report due dates. Unless the Administrator has approved a different schedule, you must submit a semiannual compliance report to your permitting authority according to the requirements specified in paragraphs (a)(1) through (5) of this section.

(1) The first compliance report must cover the period beginning on the compliance date that is specified for your affected source in §63.7883 and ending on June 30 or December 31, whichever date comes first after the compliance date that is specified for your affected source.

(2) The first compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date comes first after your first compliance report is due.

(3) 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) Each subsequent compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date comes first after the end of the semiannual reporting period.

(5) For each affected source that is subject to permitting regulations pursuant to 40 CFR part 70 or 40 CFR part 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 the dates specified in paragraphs (a)(1) through (4) of this section.

(b) Compliance report contents. Each compliance report must include the information specified in paragraphs (b)(1) through (3) of this section and, as applicable, paragraphs (b)(4) through (9) of this section.

(1) Company name and address.

(2) Statement by a responsible official, with that official’s name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report.

(3) Date of report and beginning and ending dates of the reporting period.

(4) If you had a startup, shutdown, or malfunction during the reporting period and you took action consistent with your startup, shutdown, and malfunction plan, the compliance report must include the information in §63.10(d)(5)(i).

(5) If there were no deviations from any emissions limitations (including operating limit), work practice standards, or operation and maintenance requirements, a statement that there were no deviations from the emissions limitations, work practice standards, or operation and maintenance requirements during the reporting period.

(6) If there were no periods during which a continuous monitoring system (including a CPMS or CEMS) was out-of-control as specified by §63.8(c)(7), a statement that there were no periods during which the CPMS was out-of-control during the reporting period.

(7) For each deviation from an emissions limitation (including an operating limit) that occurs at an affected source for which you are not using a continuous monitoring system (including a CPMS or CEMS) to comply with...
§ 63.7951 40 CFR Ch. I (7–1–16 Edition)

an emissions limitation or work practice standard required in this subpart, the compliance report must contain the information specified in paragraphs (b)(1) through (4) and (b)(7)(i) and (ii) of this section. This requirement includes periods of startup, shutdown, and malfunction.

(i) The total operating time of each affected source during the reporting period.

(ii) Information on the number, duration, and cause of deviations (including unknown cause) as applicable and the corrective action taken.

(b) For each deviation from an emissions limitation (including an operating limit) or work practice standard occurring at an affected source where you are using a continuous monitoring system (including a CPMS or CEMS) to comply with the emissions limitations or work practice standard in this subpart, you must include the information specified in paragraphs (b)(1) through (4) and (b)(8)(i) through (xi) of this section. This requirement includes periods of startup, shutdown, and malfunction.

(i) The date and time that each malfunction started and stopped.

(ii) The date and time that each continuous monitoring system was inoperative, except for zero (low-level) and high-level checks.

(iii) The date, time, and duration that each continuous monitoring system was out-of-control, including the information in §63.8(c)(8).

(iv) The date and time that each deviation started and stopped, and whether each deviation occurred during a period of startup, shutdown, or malfunction or during another period.

(v) A summary of the total duration of the deviations during the reporting period and the total duration as a percent of the total source operating time during that reporting period.

(vi) A breakdown of the total duration of the deviations during the reporting period into those that are due to startup, shutdown, control equipment problems, process problems, other known causes, and unknown causes.

(vii) A summary of the total duration of continuous monitoring system downtime as a percent of the total source operating time during the reporting period.

(viii) A brief description of the process units.

(ix) A brief description of the continuous monitoring system.

(x) The date of the latest continuous monitoring system certification or audit.

(xi) A description of any changes in continuous monitoring systems, processes, or controls since the last reporting period.

(9) You must include the information on equipment leaks required in periodic reports by §63.1018(a) or §63.1039(b).

(c) Immediate startup, shutdown, and malfunction report. If you had a startup, shutdown, or malfunction during the semiannual reporting period that was not consistent with your startup, shutdown, and malfunction plan, you must submit an immediate startup, shutdown, and malfunction report according to the requirements of §63.10(d)(5)(i).

(d) Part 70 monitoring report. If you have obtained a title V operating permit for an affected source pursuant to 40 CFR part 70 or 40 CFR part 71, you 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 you submit a compliance report for an affected source 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 the required information concerning deviations from any emissions limitation or operation and maintenance requirement in this subpart, submission of the compliance report satisfies any obligation to report the same deviations in the semiannual monitoring report. However, submission of a compliance report does not otherwise affect any obligation you may have to report deviations from permit requirements for an affected source to your permitting authority.
§ 63.7952 What records must I keep?

(a) You must keep the records specified in paragraphs (a)(1) through (4) 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 requirements in §63.10(b)(1) and (b)(2)(xiv).

(2) The records in §63.6(e)(3)(iii) through (v) related to startups, shutdowns, and malfunctions.

(3) Results of performance tests and performance evaluations as required by §63.10(b)(2)(viii).

(4) The records of initial and ongoing determinations for affected sources that are exempt from control requirements under this subpart.

(b) For each continuous monitoring system, you must keep the records as described in paragraphs (b)(1) and (2) of this section.

(1) Records described in §63.10(b)(2)(vi) through (xi) that apply to your continuous monitoring system.

(2) Performance evaluation plans, including previous (i.e., superseded) versions of the plan as required in §63.8(d)(3).

(c) You must keep the records required by this subpart to show continuous compliance with each emissions limitation, work practice standard, and operation and maintenance requirement that applies to you.

(d) You must record, on a semiannual basis, the information in §63.696(g) for planned routine maintenance of a control device for emissions from process vents.

§ 63.7953 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 your files of all information (including all reports and notifications) for 5 years following the date of each occurrence, measurement, maintenance, action taken to correct the cause of a deviation, report, or record.

(c) You must keep each record on site for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to §63.10(b)(1). You can keep the records off-site for the remaining 3 years.

(d) If, after the remediation activity is completed, there is no other remediation activity at the facility, and you are no longer the owner of the facility, you may keep all records for the completed remediation activity at an off-site location provided you notify the Administrator in writing of the name, address and contact person for the off-site location.

§ 63.7955 What parts of the General Provisions apply to me?

Table 3 of this subpart shows which parts of the General Provisions in §§63.1 through 63.15 apply to you.

§ 63.7956 Who implements and enforces this subpart?

(a) This subpart can be implemented and enforced by us, the EPA, or a delegated authority such as your State, local, or tribal agency. If the EPA Administrator has delegated authority to your State, local, or tribal agency, then that agency, in addition to the EPA, has the authority to implement and enforce this subpart. You should contact your EPA Regional Office (see list in §63.13) 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 section 40 CFR part 63, subpart E, the authorities contained in paragraph (c) of this section are retained by the Administrator of EPA and are not transferred to the State, local, or tribal agency.

(c) The authorities that cannot be delegated to State, local, or tribal agencies are listed in paragraphs (c)(1) through (4) of this section.

(1) Approval of alternatives to the non-opacity emissions limitations and work practice standards in this subpart under §63.6(g).
§ 63.7957

(2) Approval of major changes to test methods under § 63.7(e)(2)(ii) and (f) and as defined in § 63.90.

(3) Approval of major changes to monitoring under § 63.8(f) and as defined in § 63.90.

(4) Approval of major changes to recordkeeping and reporting under § 63.10(f) and as defined in § 63.90.

[68 FR 58190, Oct. 8, 2003, as amended at 71 FR 69019, Nov. 29, 2006]

§ 63.7957 What definitions apply to this subpart?

Terms used in this subpart are defined in the CAA, in § 63.2, and in this section. If a term is defined both in this section and in another subpart cross-referenced by this subpart, then the term will have the meaning given in this section for purposes of this subpart.

Boiler means an enclosed combustion device that extracts useful energy in the form of steam and is not an incinerator or a process heater.

Closed vent system means a system that is not open to the atmosphere and is composed of hard-piping, ductwork, connections, and, if necessary, fans, blowers, or other flow-inducing device that conveys gas or vapor from an emissions point to a control device.

Closure device means a cap, hatch, lid, plug, seal, valve, or other type of fitting that prevents or reduces air pollutant emissions to the atmosphere by forming a continuous barrier over the remediation material managed in a unit. A cover may have openings (such as access hatches, sampling ports, gauge wells) that are necessary for operation, inspection, maintenance, and repair of the unit on which the cover is used. A cover may be a separate piece of equipment which can be detached and removed from the unit (such as a tarp) or a cover may be formed by structural features permanently integrated into the design of the unit.

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 emissions limitation (including any operating limit), or work practice standard; or

(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, (including any operating limit), or work practice standard in this subpart during startup, shutdown, or malfunction, regardless of whether or not such failure is permitted by this subpart.

Emissions limitation means any emissions limit, opacity limit, operating limit, or visible emissions limit.

Emissions point means an individual tank, surface impoundment, container, oil-water separator, organic-water separator, transfer system, vent, or enclosure.

Continuous record means documentation of data values measured at least once every 15 minutes and recorded at the frequency specified in this subpart.

Continuous recorder means a data recording device that either records an instantaneous data value at least once every 15 minutes or records 15-minutes or more frequent block averages.

Control device means equipment used recovering, removing, oxidizing, or destroying organic vapors. Examples of such equipment include but are not limited to carbon adsorbers, condensers, vapor incinerators, flares, boilers, and process heaters.

Cover means a device that prevents or reduces air pollutant emissions to the atmosphere by forming a continuous barrier over the remediation material managed in a unit. A cover may have openings (such as access hatches, sampling ports, gauge wells) that are necessary for operation, inspection, maintenance, and repair of the unit on which the cover is used. A cover may be a separate piece of equipment which can be detached and removed from the unit (such as a tarp) or a cover may be formed by structural features permanently integrated into the design of the unit.

Container means a portable unit used to hold material. Examples of containers include, but are not limited to drums, dumpsters, roll-off boxes, bulk cargo containers commonly known as portable tanks or totes, cargo tank trucks, dump trucks, and rail cars. For the purpose of this subpart, a front-end loader, excavator, backhoe, or other type of self-propelled excavation equipment is not a container.

Continuous record means documentation of data values measured at least
Enclosure means a structure that surrounds a tank or container, captures organic vapors emitted from the tank or container, and vents the captured vapor through a closed vent system to a control device.

Equipment means each pump, pressure relief device, sampling connection system, valve, and connector used in remediation material service at a facility.

External floating roof means a pontoon-type or double-deck type cover that rests on the liquid surface in a tank with no fixed roof.

Facility means all contiguous or adjoining property that is under common control including properties that are separated only by a road or other public right-of-way. Common control includes properties that are owned, leased, or operated by the same entity, parent entity, subsidiary, or any combination thereof. A unit or group of units within a contiguous property that are not under common control (e.g., a wastewater treatment unit located at the facility but is owned by a different company) is a different facility.

Fixed roof means a cover that is mounted on a unit in a stationary position and does not move with fluctuations in the level of the liquid managed in the unit.

Flame zone means the portion of the combustion chamber in a boiler or process heater occupied by the flame envelope.

Floating roof means a cover consisting of a double deck, pontoon single deck, or internal floating cover which rests upon and is supported by the liquid being contained, and is equipped with a continuous seal.

Flow indicator means a device that indicates whether gas is flowing, or whether the valve position would allow gas to flow in a bypass line.

Hard-piping means pipe or tubing that is manufactured and properly installed according to relevant standards and good engineering practices.

Individual drain system means a stationary system used to convey wastewater streams or residuals to a remediation material management unit or to discharge or disposal. The term includes hard-piping, all drains and junction boxes, together with their associated sewer lines and other junction boxes (e.g., manholes, sumps, and lift stations) conveying wastewater streams or residuals. For the purpose of this subpart, an individual drain system is not a drain and collection system that is designed and operated for the sole purpose of collecting rainfall runoff (e.g., stormwater sewer system) and is segregated from all other individual drain systems.

Internal floating roof means a cover that rests or floats on the liquid surface (but not necessarily in complete contact with it inside a tank that has a fixed roof).

Maximum HAP vapor pressure means the sum of the individual HAP equilibrium partial pressure exerted by remediation material at the temperature equal to either: the monthly average temperature as reported by the National Weather Service when the remediation material is stored or treated at ambient temperature; or the highest calendar-month average temperature of the remediation material when the remediation material is stored at temperatures above the ambient temperature or when the remediation material is stored or treated at temperatures below the ambient temperature. For the purpose of this subpart, maximum HAP vapor pressure is determined using the procedures specified in §63.7944.

No detectable organic emissions means no escape of organics to the atmosphere as determined using the procedure specified in §63.694(k).

Oil-water separator means a separator as defined for this subpart that is used to separate oil from water.

Operating parameter value means a minimum or maximum value established for a control device or treatment process parameter which, if achieved by itself or in combination with one or more other operating parameter values, determines that an owner or operator has complied with an applicable emissions limitation or standard.

Organic-water separator means a separator as defined for this subpart that is used to separate organics from water.

Process heater means an enclosed combustion device that transfers heat released by burning fuel directly to
§ 63.7957 40 CFR Ch. I (7–1–16 Edition)

Process streams or to heat transfer liquids other than water.

Process vent means any open-ended pipe, stack, duct, or other opening intended to allow the passage of gases, vapors, or fumes to the atmosphere and this passage is caused by mechanical means (such as compressors, vacuum-producing systems or fans) or by process-related means (such as volatilization produced by heating). For the purposes of this subpart, a process vent is neither a safety device (as defined in this section) nor a stack, duct or other opening used to exhaust combustion products from a boiler, furnace, heater, incinerator, or other combustion device.

Radioactive mixed waste means a material that contains both hazardous waste subject to RCRA and source, special nuclear, or by-product material subject to the Atomic Energy Act of 1954.

Remediation material means a material that contains one or more of the HAP listed in Table 1 of this subpart, and this material is one of the following:

1. A material found in naturally occurring media such as soil, groundwater, surface water, sediments, or a mixture of such materials with liquids, sludges, or solids which is inseparable by simple mechanical removal processes and is made up primarily of media. This material does not include debris as defined in 40 CFR 268.2.

2. A material found in intact or substantially intact containers, tanks, storage piles, or other storage units that requires clean up because this material poses a reasonable potential threat to contaminating media. Examples of these materials include, but are not limited to, solvents, oils, paints, and other volatile or semi-volatile organic liquids found in buried drums, cans, or other containers; gasoline, fuel oil, or other fuels in leaking underground storage tanks; and solid materials containing volatile or semi-volatile organics in unused or abandoned piles. Remediation material is not a waste or residue generated by routine equipment maintenance activities performed at a facility such as, but not limited to, tank bottoms and sludges removed during tank cleanouts; sludges and sediments removed from active wastewater treatment tanks, surface impoundments, or lagoons; spent catalyst removed from process equipment; residues removed from air pollution control equipment; and debris removed during heat exchanger and pipeline cleanouts.

Remediation material management unit means a tank, container, surface impoundment, oil-water separator, organic-water separator, or transfer system used to remove, destroy, degrade, transform, immobilize, or otherwise manage remediation material.

Remediation material service means any time when a pump, compressor, agitator, pressure relief device, sampling connection system, open-ended valve or line, valve, connector, or instrumentation system contains or contacts remediation material.

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

Safety device means a closure device such as a pressure relief valve, frangible disc, fusible plug, or any other type of device which functions to prevent physical damage or permanent deformation to equipment by venting gases or vapors during unsafe conditions resulting from an unplanned, accidental, or emergency event. For the purpose of this Subpart, a safety device is not used for routine venting of gases or vapors from the vapor headspace underneath a cover such as during filling of the unit or to adjust the pressure in this vapor headspace in response to normal daily diurnal ambient temperature fluctuations. A safety device is designed to remain in a closed position during normal operations and open only when the internal pressure, or another relevant parameter, exceeds the device threshold setting applicable to the equipment as determined by the owner or operator based on manufacturer recommendations, applicable regulations, fire protection and prevention codes, standard engineering codes and practices, or other requirements for the safe handling of flammable, combustible, explosive, reactive, or hazardous materials.

Separator means a remediation material management unit, generally a tank, used to separate oil or organics from water. A separator consists of not
only the separation unit but also the forebay and other separator basins, skimmers, weirs, grit chambers, sludge hoppers, and bar screens that are located directly after the individual drain system and prior to any additional treatment units such as an air flotation unit, clarifier or biological treatment unit. Examples of a separator include, but are not limited to, an API separator, parallel-plate interceptor, and corrugated-plate interceptor with the associated ancillary equipment.

Site remediation means one or more activities or processes used to remove, destroy, degrade, transform, immobilize, or otherwise manage remediation material. The monitoring or measuring of contamination levels in environmental media using wells or by sampling is not considered to be a site remediation.

Sludge means sludge as defined in §260.10 of this chapter.

Soil means unconsolidated earth material composing the superficial geologic strata (material overlying bedrock), consisting of clay, silt, sand, or gravel size particles (sizes as classified by the U.S. Soil Conservation Service), or a mixture of such materials with liquids, sludges, or solids which is inseparable by simple mechanical removal processes and is made up primarily of soil.

Stabilization process means any physical or chemical process used to either reduce the mobility of contaminants in media or eliminate free liquids as determined by Test Method 9095—Paint Filter Liquids Test in “Test Methods for Evaluating Solid Waste, Physical/Chemical Methods,” EPA Publication No. SW-846, Third Edition, September 1986, as amended by Update 1, November 15, 1992. (As an alternative, you may use any more recent, updated version of Method 9095 approved by the EPA). A stabilization process includes mixing remediation material with binders or other materials, and curing the resulting remediation material and binder mixture. Other synonymous terms used to refer to this process are fixation or solidification. A stabilization process does not include the adding of absorbent materials to the surface of remediation material, without mixing, agitation, or subsequent curing, to absorb free liquid.

Surface impoundment means a unit that is a natural topographical depression, man-made excavation, or diked area formed primarily of earthen materials (although it may be lined with man-made materials), which is designed to hold an accumulation of liquids. Examples of surface impoundments include holding, storage, settling, and aeration pits, ponds, and lagoons.

Tank means a stationary unit that is constructed primarily of nonearthen materials (such as wood, concrete, steel, fiberglass, or plastic) which provide structural support and is designed to hold an accumulation of liquids or other materials.

Temperature monitoring device means a piece of equipment used to monitor temperature and having an accuracy of ±1 percent of the temperature being monitored expressed in degrees Celsius (°C) or ±2 degrees °C, whichever value is greater.

Transfer system means a stationary system for which the predominant function is to convey liquids or solid materials from one point to another point within a waste management operation or recovery operation. For the purpose of this subpart, the conveyance of material using a container (as defined for this subpart) or a self-propelled vehicle (e.g., a front-end loader) is not a transfer system. Examples of a transfer system include but are not limited to a pipeline, an individual drain system, a gravity-operated conveyor (such as a chute), and a mechanically-powered conveyor (such as a belt or screw conveyor).

Treatment process means a process in which remediation material is physically, chemically, thermally, or biologically treated to destroy, degrade, or remove hazardous air pollutants contained in the material. A treatment process can be composed of a single unit (e.g., a steam stripper) or a series of units (e.g., a wastewater treatment system). A treatment process can be used to treat one or more remediation material streams at the same time.

Volatile organic hazardous air pollutant (VOHAP) concentration means the fraction by weight of the HAP listed in...
Table 1 of this subpart that are contained in the remediation material as measured using Method 305, 40 CFR part 63, appendix A and expressed in terms of parts per million (ppm). As an alternative to using Method 305, 40 CFR part 63, appendix A, you may determine the HAP concentration of the remediation material using any one or the other test methods specified in §63.694(b)(2)(ii). When a test method specified in §63.694(b)(2)(ii) other than Method 305 in 40 CFR part 63, appendix A is used to determine the speciated HAP concentration of the contaminated material, the individual compound concentration may be adjusted by the corresponding F_{adj} listed in Table 1 of this subpart to determine a VOHAP concentration.

Work practice standard means any design, equipment, work practice, or operational standard, or combination thereof, that is promulgated pursuant to section 112(h) of the CAA.

[68 FR 58190, Oct. 8, 2003, as amended at 71 FR 69019, Nov. 29, 2006]

### Table 1 to Subpart GGGGG of Part 63—List of Hazardous Air Pollutants

<table>
<thead>
<tr>
<th>CAS No.</th>
<th>Compound name</th>
<th>F_{adj}</th>
</tr>
</thead>
<tbody>
<tr>
<td>75070</td>
<td>Acetaldehyde</td>
<td>1.000</td>
</tr>
<tr>
<td>75058</td>
<td>Acetonitrile</td>
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</tr>
<tr>
<td>98862</td>
<td>Acetophenone</td>
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</tr>
<tr>
<td>98868</td>
<td>Acetophenone</td>
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</tr>
<tr>
<td>107028</td>
<td>Acrolein</td>
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</tr>
<tr>
<td>107131</td>
<td>Acrylonitrile</td>
<td>0.999</td>
</tr>
<tr>
<td>107051</td>
<td>Allyl chloride</td>
<td>1.000</td>
</tr>
<tr>
<td>71432</td>
<td>Benzene (includes benzene in gasoline)</td>
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</tr>
<tr>
<td>96077</td>
<td>Benzyl chloride</td>
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</tr>
<tr>
<td>100447</td>
<td>Benzyl chloride</td>
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</tr>
<tr>
<td>92524</td>
<td>Biphenyl</td>
<td>0.864</td>
</tr>
<tr>
<td>542881</td>
<td>Bis(chloromethyl)ether &amp;</td>
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</tr>
<tr>
<td>75252</td>
<td>Bromoform</td>
<td>0.998</td>
</tr>
<tr>
<td>106990</td>
<td>1,3-Butadiene</td>
<td>1.000</td>
</tr>
<tr>
<td>75159</td>
<td>Carbon disulfide</td>
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</tr>
<tr>
<td>56235</td>
<td>Carbon tetrachloride</td>
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</tr>
<tr>
<td>43581</td>
<td>Carbonyl sulfide</td>
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<tr>
<td>13904</td>
<td>Chloramben</td>
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<tr>
<td>108907</td>
<td>Chlorobenzene</td>
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<tr>
<td>67663</td>
<td>Chloriform</td>
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</tr>
<tr>
<td>107302</td>
<td>Chloromethyl methyl ether &amp;</td>
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</tr>
<tr>
<td>126998</td>
<td>Chloroprene</td>
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</tr>
<tr>
<td>98828</td>
<td>Cumene</td>
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</tr>
<tr>
<td>94757</td>
<td>2,4-D, salts and esters</td>
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</tr>
<tr>
<td>334883</td>
<td>Diazomethane &amp;</td>
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</tr>
<tr>
<td>126649</td>
<td>Dibenzo[cd]anthracene</td>
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<tr>
<td>96128</td>
<td>1,2-Dibromo-3-chloropropane</td>
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<td>106467</td>
<td>1,4-Dichlorobenzene and</td>
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<tr>
<td>107082</td>
<td>Dichloroethene (Ethylene dichloride)</td>
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<tr>
<td>111444</td>
<td>Dichloroethene ether (Bis(2-chloroethyl)ether)</td>
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<td>542756</td>
<td>1,3-Dichloropropene</td>
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<tr>
<td>64675</td>
<td>Diethyl sulfate</td>
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<tr>
<td>79447</td>
<td>Dimethyl carboxy methyl chloride &amp;</td>
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</tr>
<tr>
<td>77781</td>
<td>Dimethyl sulfide</td>
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<td>121697</td>
<td>N,N-Dimethylamine</td>
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</tr>
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<td>51285</td>
<td>2,4-Dinitrophenol</td>
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</tr>
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<td>121142</td>
<td>2,4-Dinitrotoluene</td>
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</tr>
<tr>
<td>123911</td>
<td>1,4-Dioxane (1,4-Dioxan)</td>
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</tr>
<tr>
<td>106898</td>
<td>Epichlorohydrin (1-Chloro-2,3-epoxypropane)</td>
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<tr>
<td>106887</td>
<td>1,3-Epoxypentane</td>
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</tr>
<tr>
<td>140885</td>
<td>Ethyl acrylate</td>
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</tr>
<tr>
<td>100414</td>
<td>Ethyl benzene</td>
<td>1.000</td>
</tr>
<tr>
<td>75003</td>
<td>Ethyl chloride (Chloroethane)</td>
<td>1.000</td>
</tr>
<tr>
<td>106934</td>
<td>Ethylene dibromide (Dibromomethane)</td>
<td>0.999</td>
</tr>
<tr>
<td>107062</td>
<td>Ethylene dichloride (1,2-Dichloroethane)</td>
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</tr>
<tr>
<td>151564</td>
<td>Ethylene imine (Aziridine)</td>
<td>0.867</td>
</tr>
<tr>
<td>75218</td>
<td>Ethylene oxide</td>
<td>1.000</td>
</tr>
<tr>
<td>75343</td>
<td>Ethylene dichloride (1,1-Dichloroethane)</td>
<td>1.000</td>
</tr>
</tbody>
</table>

Glycol ethers & that have a Henry's Law Constant value equal to or greater than 0.01 Y/X(1.8 \times 10^{-6} atm/gm-moles/m^3) at 25 °C.

Hexachlorobenzene | 0.97
Table 2 to Subpart GGGG 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>
<thead>
<tr>
<th>CAS No.</th>
<th>Compound name</th>
<th>( F_m ) set</th>
</tr>
</thead>
<tbody>
<tr>
<td>87683</td>
<td>Hexachlorobutadiene</td>
<td>0.88</td>
</tr>
<tr>
<td>67721</td>
<td>Hexachloroethane</td>
<td>0.499</td>
</tr>
<tr>
<td>110543</td>
<td>Hexane</td>
<td>1.00</td>
</tr>
<tr>
<td>78591</td>
<td>Isophorone</td>
<td>0.506</td>
</tr>
<tr>
<td>58999</td>
<td>Lindane (all isomers)</td>
<td>1.00</td>
</tr>
<tr>
<td>67561</td>
<td>Methanol</td>
<td>0.855</td>
</tr>
<tr>
<td>74839</td>
<td>Methyl bromide (Bromomethane)</td>
<td>1.00</td>
</tr>
<tr>
<td>74873</td>
<td>Methyl chloride (Chloromethane)</td>
<td>1.00</td>
</tr>
<tr>
<td>71556</td>
<td>Methyl chloroform (1,1,1-Trichloroethane)</td>
<td>1.00</td>
</tr>
<tr>
<td>74884</td>
<td>Methyl iodide (Iodomethane)</td>
<td>1.00</td>
</tr>
<tr>
<td>108101</td>
<td>Methyl isobutyl ketone (Hexone)</td>
<td>0.979</td>
</tr>
<tr>
<td>624839</td>
<td>Methyl isocyanate</td>
<td>1.00</td>
</tr>
<tr>
<td>80626</td>
<td>Methyl methacrylate</td>
<td>0.999</td>
</tr>
<tr>
<td>1634044</td>
<td>Methyl tert butyl ether</td>
<td>1.00</td>
</tr>
<tr>
<td>75902</td>
<td>Methylene chloride (Dichloromethane)</td>
<td>1.00</td>
</tr>
<tr>
<td>91203</td>
<td>Naphthalene</td>
<td>0.984</td>
</tr>
<tr>
<td>98953</td>
<td>Nitrobenzene</td>
<td>0.384</td>
</tr>
<tr>
<td>79469</td>
<td>2-Nitropropane</td>
<td>0.989</td>
</tr>
<tr>
<td>82688</td>
<td>Pentachloronitrobenzene (Quinobenzene)</td>
<td>0.839</td>
</tr>
<tr>
<td>87865</td>
<td>Pentachlorophenol</td>
<td>0.8989</td>
</tr>
<tr>
<td>75445</td>
<td>Phosgene</td>
<td>1.00</td>
</tr>
<tr>
<td>123386</td>
<td>Propionaldehyde</td>
<td>0.999</td>
</tr>
<tr>
<td>78875</td>
<td>Propylene dichloride (1,2-Dichloropropane)</td>
<td>1.00</td>
</tr>
<tr>
<td>75569</td>
<td>Propylene oxide</td>
<td>1.0</td>
</tr>
<tr>
<td>75558</td>
<td>1,2-Propyleneimine (2-Methyl aziridine)</td>
<td>0.945</td>
</tr>
<tr>
<td>100425</td>
<td>Styrene</td>
<td>1.00</td>
</tr>
<tr>
<td>96093</td>
<td>Styrene oxide</td>
<td>0.83</td>
</tr>
<tr>
<td>79345</td>
<td>1,1,2,2-Tetrachloroethane</td>
<td>0.999</td>
</tr>
<tr>
<td>127184</td>
<td>Tetrachloroethylene (Perchloethylene)</td>
<td>1.00</td>
</tr>
<tr>
<td>108853</td>
<td>Toluene</td>
<td>1.00</td>
</tr>
<tr>
<td>95534</td>
<td>o-Toluidine</td>
<td>0.152</td>
</tr>
<tr>
<td>120823</td>
<td>1,2,4-Trichlorobenzene</td>
<td>1.00</td>
</tr>
<tr>
<td>71556</td>
<td>1,1,1-Trichloroethane (Methyl chloroform)</td>
<td>1.00</td>
</tr>
<tr>
<td>79005</td>
<td>1,1,2-Trichloroethane (Vinylchloride)</td>
<td>1.00</td>
</tr>
<tr>
<td>79016</td>
<td>Trichloroethylene</td>
<td>1.00</td>
</tr>
<tr>
<td>95954</td>
<td>2,4,6-Trichlorophenol</td>
<td>0.0108</td>
</tr>
<tr>
<td>88062</td>
<td>2,4,6-Trichlorophenol</td>
<td>0.0132</td>
</tr>
<tr>
<td>121448</td>
<td>Triethylamine</td>
<td>1.00</td>
</tr>
<tr>
<td>540841</td>
<td>2,2,4-Trimethylpentane</td>
<td>1.00</td>
</tr>
<tr>
<td>108054</td>
<td>Vinyl acetate</td>
<td>1.00</td>
</tr>
<tr>
<td>933602</td>
<td>Vinyl chloride</td>
<td>1.00</td>
</tr>
<tr>
<td>75014</td>
<td>Vinyl chloride</td>
<td>1.00</td>
</tr>
<tr>
<td>75354</td>
<td>Vinylidene chloride (1,1-Dichloroethylene)</td>
<td>1.00</td>
</tr>
<tr>
<td>1330207</td>
<td>Xylenes (isomers and mixture)</td>
<td>1.00</td>
</tr>
<tr>
<td>95476</td>
<td>o-Xylenes</td>
<td>1.00</td>
</tr>
<tr>
<td>108383</td>
<td>m-Xylenes</td>
<td>1.00</td>
</tr>
<tr>
<td>106423</td>
<td>p-Xylenes</td>
<td>1.00</td>
</tr>
</tbody>
</table>

Notes:
- \( F_m \): Fraction measure factor in Method 305, 40 CFR 305 part 63, appendix A.
- CAS numbers refer to the Chemical Abstracts Services registry number assigned to specific compounds, isomers, or mixtures of compounds.
- Denotes a HAP that hydrolyzes quickly in water, but the hydrolysis products are also HAP chemicals.
- Denotes a HAP that may react violently with water.
- Denotes a HAP that hydrolyzes slowly in water.
- The \( F_m \) factors for some of the more common glycol 305 ethers can be obtained by contacting the Waste and Chemical Processes Group, Office of Air Quality Planning and Standards, Research Triangle Park, NC 27701.

If your tank design capacity is . . . And the maximum HAP vapor pressure of the remediation material placed in your tank is . . . Then your tank must use . . .

1. Less than 38 m³ ............... Less than 76.6 kPa ............... Tank Level 1 controls under §63.7895(b).
2. At least 38 m³ but less than 151 m³ .... Less than 13.1 kPa ............... Tank Level 1 controls under §63.7895(b).
3. 151 m³ or greater ............... Less than 0.7 kPa ............... Tank Level 1 controls under §63.7895(b).
### Table 3 to Subpart GGGG of Part 63—Applicability of General Provisions to Subpart GGGG

As stated in §63.7940, you must comply with the applicable General Provisions requirements according to the following table:

<table>
<thead>
<tr>
<th>Citation</th>
<th>Subject</th>
<th>Brief description</th>
<th>Applies to subpart GGGG</th>
</tr>
</thead>
<tbody>
<tr>
<td>§63.1</td>
<td>Applicability</td>
<td>Initial Applicability Determination; Applicability After Standard Established; Permit Requirements; Extensions, Notifications.</td>
<td>Yes.</td>
</tr>
<tr>
<td>§63.2</td>
<td>Definitions</td>
<td>Definitions for part 63 standards</td>
<td>Yes.</td>
</tr>
<tr>
<td>§63.3</td>
<td>Units and Abbreviations</td>
<td>Units and abbreviations for part 63 standards.</td>
<td>Yes.</td>
</tr>
<tr>
<td>§63.4</td>
<td>Prohibited Activities</td>
<td>Prohibited Activities; Compliance date; Circumvention, Severability.</td>
<td>Yes.</td>
</tr>
<tr>
<td>§63.5</td>
<td>Construction/Reconstruction</td>
<td>Applicability; applications; approvals</td>
<td>Yes.</td>
</tr>
<tr>
<td>§63.6(a)</td>
<td>Applicability</td>
<td>General Provisions (GP) apply unless compliance extension GP apply to area sources that become major.</td>
<td>Yes.</td>
</tr>
<tr>
<td>§63.6(b)(1)−(4)</td>
<td>Compliance Dates for New and Reconstructed sources</td>
<td>Standards apply at effective date; 3 years after effective date; upon startup; 10 years after construction or reconstruction commences for 112(f).</td>
<td>Yes.</td>
</tr>
<tr>
<td>§63.6(b)(5)</td>
<td>Notification</td>
<td>Must notify if commenced construction or reconstruction after proposal.</td>
<td>Yes.</td>
</tr>
<tr>
<td>§63.6(b)(6)</td>
<td>[Reserved]</td>
<td>Must notify if commenced construction or reconstruction after proposal.</td>
<td>Yes.</td>
</tr>
<tr>
<td>§63.6(b)(7)</td>
<td>Compliance Dates for New and Reconstructed Area Sources That Become Major.</td>
<td>Area sources that become major must comply with major source standards immediately upon becoming major, regardless of whether required to comply when they were an area source.</td>
<td>Yes.</td>
</tr>
<tr>
<td>§63.6(c)(1)−(2)</td>
<td>Compliance Dates for Existing Sources</td>
<td>Comply according to date in subpart, which must be no later than 3 years after effective date. For 112(f) standards, comply within 90 days of effective date unless compliance extension.</td>
<td>Yes.</td>
</tr>
<tr>
<td>§63.6(c)(3)−(4)</td>
<td>[Reserved]</td>
<td>Area sources that become major must comply with major source standards immediately upon becoming major, regardless of whether required to comply when they were an area source.</td>
<td>Yes.</td>
</tr>
<tr>
<td>§63.6(c)(5)</td>
<td>Compliance Dates for Existing Area Sources That Become Major.</td>
<td>Area sources that become major must comply with major source standards by date indicated in subpart or by equivalent time period (for example, 3 years).</td>
<td>Yes.</td>
</tr>
<tr>
<td>§63.6(d)</td>
<td>[Reserved]</td>
<td>Must notify if commenced construction or reconstruction after proposal.</td>
<td>Yes.</td>
</tr>
<tr>
<td>§63.6(e)(1)−(2)</td>
<td>Operation &amp; Maintenance</td>
<td>Operate to minimize emissions at all times. Correct malfunctions as soon as practicable. Operation and maintenance requirements independently enforceable; information Administrator will use to determine if operation and maintenance requirements were met.</td>
<td>Yes.</td>
</tr>
<tr>
<td>§63.6(e)(3)</td>
<td>Startup, Shutdown, and Malfunction Plan (SSMP).</td>
<td>Requirement for startup, shutdown and malfunction (SSM) and SSMP. Content of SSMP.</td>
<td>Yes with the exception of containers using either Level 1 or Level 2 controls.</td>
</tr>
<tr>
<td>§63.6(f)(1)</td>
<td>Compliance Except During SSM</td>
<td>You must comply with emissions standards at all times except during SSM.</td>
<td>Yes.</td>
</tr>
<tr>
<td>§63.6(f)(2)−(3)</td>
<td>Methods for Determining Compliance</td>
<td>Compliance based on performance test, operation and maintenance plans, records, inspection.</td>
<td>Yes.</td>
</tr>
<tr>
<td>§63.6(g)(1)−(3)</td>
<td>Alternative Standard</td>
<td>Procedures for getting an alternative standard.</td>
<td>Yes.</td>
</tr>
<tr>
<td>Citation</td>
<td>Subject</td>
<td>Brief description</td>
<td>Applies to subpart GGGGG</td>
</tr>
<tr>
<td>----------</td>
<td>---------</td>
<td>-----------------</td>
<td>-------------------------</td>
</tr>
<tr>
<td>§63.6(h)</td>
<td>Opacity/Visible Emissions (VE) Standards.</td>
<td>Requirements for opacity and visible emissions limits.</td>
<td>No. No opacity standards.</td>
</tr>
<tr>
<td>§63.6(i)(1)–(14)</td>
<td>Compliance Extension</td>
<td>Procedures and criteria for Administrator</td>
<td>Yes.</td>
</tr>
<tr>
<td>§63.6(j)</td>
<td>Presidential Compliance Exemption</td>
<td>President may exempt source category from requirement to comply with final rule.</td>
<td>Yes.</td>
</tr>
<tr>
<td>§63.7(a)(1)–(2)</td>
<td>Performance Test Dates</td>
<td>Dates for Conducting Initial Performance Testing and Other Compliance Demonstrations. Must conduct 180 days after first subject to final rule.</td>
<td>Yes.</td>
</tr>
<tr>
<td>§63.7(a)(3)</td>
<td>CAA Section 114 Authority</td>
<td>Administrator may require a performance test under CAA section 114 at any time.</td>
<td>Yes.</td>
</tr>
<tr>
<td>§63.7(b)(1)</td>
<td>Notification of Performance Test</td>
<td>Must notify Administrator 60 days before the test.</td>
<td>Yes.</td>
</tr>
<tr>
<td>§63.7(b)(2)</td>
<td>Notification of Rescheduling</td>
<td>If rescheduling a performance test is necessary, must notify Administrator 5 days before scheduled date of rescheduled date.</td>
<td>Yes.</td>
</tr>
<tr>
<td>§63.7(c)</td>
<td>Quality Assurance/Test Plan</td>
<td>Requirement to submit site-specific test plan 60 days before the test or on date Administrator agrees with: Test plan approval procedures; performance audit requirements; internal and external QA procedures for testing.</td>
<td>Yes.</td>
</tr>
<tr>
<td>§63.7(d)</td>
<td>Testing Facilities</td>
<td>Requirements for testing facilities.</td>
<td>Yes.</td>
</tr>
<tr>
<td>§63.7(e)(1)</td>
<td>Conditions for Conducting Performance Tests.</td>
<td>Performance tests must be conducted under representative conditions. Cannot conduct performance tests during SSM. Not a violation to exceed standard during SSM.</td>
<td>Yes.</td>
</tr>
<tr>
<td>§63.7(e)(2)</td>
<td>Test Run Duration</td>
<td>Must conduct according to rule and EPA test methods unless Administrator approves alternative.</td>
<td>Yes.</td>
</tr>
<tr>
<td>§63.7(e)(3)</td>
<td>Test Run Duration</td>
<td>Must have three test runs of at least one hour each. Compliance is based on arithmetic mean of three runs. Conditions when data from an additional test run can be used.</td>
<td>Yes.</td>
</tr>
<tr>
<td>§63.7(f)</td>
<td>Alternative Test Method</td>
<td>Procedures by which Administrator can grant approval to use an alternative test method.</td>
<td>Yes.</td>
</tr>
<tr>
<td>§63.7(g)</td>
<td>Performance Test Data Analysis</td>
<td>Must include raw data in performance test report. Must submit performance test data 60 days after end of test with the Notification of Compliance Status. Keep data for 5 years.</td>
<td>Yes.</td>
</tr>
<tr>
<td>§63.7(h)</td>
<td>Waiver of Tests</td>
<td>Procedures for Administrator to waive performance test.</td>
<td>Yes.</td>
</tr>
<tr>
<td>§63.8(a)(1)</td>
<td>Applicability of Monitoring Requirements</td>
<td>Subject to all monitoring requirements in standard.</td>
<td>Yes.</td>
</tr>
<tr>
<td>§63.8(a)(2)</td>
<td>Performance Specifications</td>
<td>Performance Specifications in appendix B of part 60 apply.</td>
<td>Yes.</td>
</tr>
<tr>
<td>§63.8(a)(3)</td>
<td>[Reserved]</td>
<td></td>
<td></td>
</tr>
<tr>
<td>§63.8(a)(4)</td>
<td>Monitoring with Flares</td>
<td>Unless your rule says otherwise, the requirements for flares in 63.11 apply.</td>
<td>Yes.</td>
</tr>
<tr>
<td>§63.8(b)(1)</td>
<td>Monitoring</td>
<td>Must conduct monitoring according to standard unless Administrator approves alternative.</td>
<td>Yes.</td>
</tr>
<tr>
<td>§63.8(b)(2)–(3)</td>
<td>Multiple Effluents and Multiple Monitoring Systems.</td>
<td>Specific requirements for installing monitoring systems. Must install on each effluent before it is combined and before it is released to the atmosphere unless Administrator approves otherwise. If more than one monitoring system on an emissions point, must report all monitoring system results, unless one monitoring system is a backup.</td>
<td>Yes.</td>
</tr>
<tr>
<td>§63.8(c)(1)</td>
<td>Monitoring System Operation and Maintenance.</td>
<td>Maintain monitoring system in a manner consistent with good air pollution control practices.</td>
<td>Yes.</td>
</tr>
<tr>
<td>Citation</td>
<td>Subject</td>
<td>Brief description</td>
<td>Applies to subpart GGGGG</td>
</tr>
<tr>
<td>------------------</td>
<td>---------------------------------------------------------------------------</td>
<td>-----------------------------------------------------------------------------------</td>
<td>--------------------------</td>
</tr>
<tr>
<td>§63.8(c)(1)(i)</td>
<td>Routine and Predictable SSM</td>
<td>Keep parts for routine repairs available; reporting requirements for SSM when</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td></td>
<td>action is described in SSM plan.</td>
<td></td>
</tr>
<tr>
<td>§63.8(c)(1)(ii)</td>
<td>SSM not in SSMP</td>
<td>Reporting requirements for SSM when action is not described in SSM plan.</td>
<td>Yes</td>
</tr>
<tr>
<td>§63.8(c)(1)(iii)</td>
<td>Compliance with Operation and Maintenance (O&amp;M) Requirements.</td>
<td>How Administrator determines if source complying with operation and maintenance</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td></td>
<td>requirements. Review of source O&amp;M procedures, records, Manufacturer’s instructions, recommendations, and inspection of monitoring system.</td>
<td></td>
</tr>
<tr>
<td>§63.8(c)(2)–(3)</td>
<td>Monitoring System Installation</td>
<td>Must install to get representative emissions and parameter measurements.</td>
<td>Yes</td>
</tr>
<tr>
<td>§63.8(c)(4)</td>
<td>Continuous Monitoring System (CMS) Requirements.</td>
<td>CMS must be operating except during breakdown, out-of-control, repair, maintenance, and high-level calibration drifts.</td>
<td>No</td>
</tr>
<tr>
<td>§63.8(c)(4)(i)–(ii)</td>
<td>Continuous Monitoring System (CMS) Requirements.</td>
<td>CMS must have a minimum of one cycle of sampling and analysis for each successive 10-second period and one cycle of data recording for each successive 6-minute period. CEMS must have a minimum of one cycle of operation for each successive 15-minute period.</td>
<td>Yes (However, CEMS are not applicable. Requirements for CPMS are listed in §§ 63.7900 and 63.7913).</td>
</tr>
<tr>
<td>§63.8(c)(5)</td>
<td>COMS Minimum Procedures</td>
<td>COMS minimum procedures.</td>
<td>No</td>
</tr>
<tr>
<td>§63.8(c)(6)</td>
<td>CMS Requirements</td>
<td>Zero and High level calibration check requirements.</td>
<td>Yes (However, requirements for CPMS are addressed in §63.7927).</td>
</tr>
<tr>
<td>§63.8(c)(7)–(8)</td>
<td>CMS Requirements</td>
<td>Out-of-control periods, including reporting.</td>
<td>Yes</td>
</tr>
<tr>
<td>§63.8(d)</td>
<td>CMS Quality Control</td>
<td>Requirements for CMS quality control, including calibration, etc. Must keep quality control plan on record for 5 years. Keep old versions for 5 years after revisions.</td>
<td>Yes</td>
</tr>
<tr>
<td>§63.8(e)</td>
<td>CMS Performance Evaluation</td>
<td>Notification, performance evaluation test plan, reports.</td>
<td>Yes</td>
</tr>
<tr>
<td>§63.8(f)(1)–(5)</td>
<td>Alternative Monitoring Method</td>
<td>Procedures for Administrator to approve alternative monitoring.</td>
<td>Yes</td>
</tr>
<tr>
<td>§63.8(f)(6)</td>
<td>Alternative to Relative Accuracy Test</td>
<td>Procedures for Administrator to approve alternative relative accuracy tests for CEMS.</td>
<td>No</td>
</tr>
<tr>
<td>§63.8(g)(1)–(4)</td>
<td>Data Reduction</td>
<td>COMS 6-minute averages calculated over at least 36 evenly spaced data points. CEMS 1-hour averages computed over at least 4 equally spaced data points.</td>
<td>Yes (However, CEMS are not applicable. Requirements for CPMS are addressed in §§ 63.7900 and 63.7913).</td>
</tr>
<tr>
<td>§63.8(g)(5)</td>
<td>Data Reduction</td>
<td>Data that cannot be used in computing averages for CEMS and COMS.</td>
<td>No</td>
</tr>
<tr>
<td>§63.9(a)</td>
<td>Notification Requirements</td>
<td>Submit notification 120 days after effective date. Notification of intent to construct/reconstruct; Notification of commencement of construct/reconstruct; Notification of startup. Contents of each.</td>
<td>Yes</td>
</tr>
<tr>
<td>§63.9(b)(1)–(5)</td>
<td>Initial Notifications</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>§63.9(c)</td>
<td>Request for Compliance Extension</td>
<td>Can request if cannot comply by date or if installed BACT/LAER.</td>
<td>Yes</td>
</tr>
<tr>
<td>§63.9(d)</td>
<td>Notification of Special Compliance Requirements for New Source.</td>
<td>For sources that commence construction between proposal and promulgation and want to comply 3 years after effective date.</td>
<td>Yes</td>
</tr>
<tr>
<td>§63.9(e)</td>
<td>Notification of Performance Test</td>
<td>Notify Administrator 60 days prior.</td>
<td>Yes</td>
</tr>
<tr>
<td>§63.9(f)</td>
<td>Notification of VE/Opacity Test</td>
<td>Notify Administrator 30 days prior.</td>
<td>No</td>
</tr>
<tr>
<td>Citation</td>
<td>Subject Brief description</td>
<td>Applies to subpart GGGGGG</td>
<td></td>
</tr>
<tr>
<td>------------------</td>
<td>---------------------------</td>
<td>---------------------------</td>
<td></td>
</tr>
<tr>
<td>§63.9(g)</td>
<td>Additional Notifications When Using CMS. Notification of performance evaluation. Notification using COMS data. Notification that exceeded criterion for relative accuracy.</td>
<td>Yes. However, there are no opacity standards.</td>
<td></td>
</tr>
<tr>
<td>§63.9(h)(1)–(6)</td>
<td>Notification of Compliance Status Contents. Due 60 days after end of performance test or other compliance demonstration, except for opacity/VE, which are due 30 days after. When to submit to Federal vs. State authority.</td>
<td>Yes.</td>
<td></td>
</tr>
<tr>
<td>§63.9(i)</td>
<td>Adjustment of Submittal Deadlines Procedures for Administrator to approve change in when notifications must be submitted.</td>
<td>Yes.</td>
<td></td>
</tr>
<tr>
<td>§63.9(j)</td>
<td>Change in Previous Information Must submit within 15 days after the change.</td>
<td>Yes.</td>
<td></td>
</tr>
<tr>
<td>§63.9(a)</td>
<td>Recordkeeping/Reporting Applies to all, unless compliance extension. When to submit to Federal vs. State authority. Procedures for owners of more than 1 source.</td>
<td>Yes.</td>
<td></td>
</tr>
<tr>
<td>§63.10(b)(1)</td>
<td>Recordkeeping/Reporting General Requirements. Keep all records readily available. Keep for 5 years.</td>
<td>Yes.</td>
<td></td>
</tr>
<tr>
<td>§63.10(b)(2)(i) –(iv)</td>
<td>Records related to SSM Occurrence of each of operation (process equipment). Occurrence of each malfunction of air pollution equipment. Maintenance on air pollution control equipment. Actions during startup, shutdown, and malfunction.</td>
<td>Yes.</td>
<td></td>
</tr>
<tr>
<td>§63.10(b)(2)(vi) and (x-xi)</td>
<td>CMS Records Malfunctions, inoperable, out-of-control. Calibration checks. Adjustments, maintenance.</td>
<td>Yes.</td>
<td></td>
</tr>
<tr>
<td>§63.10(b)(2)(xii)</td>
<td>Records Records when under waiver.</td>
<td>Yes.</td>
<td></td>
</tr>
<tr>
<td>§63.10(b)(2)(xii)</td>
<td>Records Records when using alternative to relative accuracy test.</td>
<td>Yes.</td>
<td></td>
</tr>
<tr>
<td>§63.10(b)(3)</td>
<td>Records Applicability Determinations Additional Records for CMS</td>
<td>Yes. No.</td>
<td></td>
</tr>
<tr>
<td>§63.10(e)(1)</td>
<td>Reports General Reporting Requirements Requirement to report Record of Performance Test Results When to submit to Federal or State authority.</td>
<td>Yes. Yes.</td>
<td></td>
</tr>
<tr>
<td>§63.10(e)(2)</td>
<td>Reports Reporting Opacity or VE Observations What to report and when Must submit progress reports on schedule if under compliance extension.</td>
<td>No. Yes.</td>
<td></td>
</tr>
<tr>
<td>§63.10(e)(3)</td>
<td>Reports Progress Reports Contents and submission</td>
<td>Yes.</td>
<td></td>
</tr>
<tr>
<td>§63.10(e)(1)–(2)</td>
<td>Additional CMS Reports Must report results for each CEM on a unit Written copy of performance evaluation Three copies of COMS performance evaluation.</td>
<td>Yes. However, COMS are not applicable.</td>
<td></td>
</tr>
<tr>
<td>§63.10(e)(3)</td>
<td>Reports Excess Emissions Reports Schedule for reporting excess emissions and parameter monitor exceedance (now defined as deviations). Requirement to revert to quarterly submission if there is an excess emissions and parameter monitor exceedance (now defined as deviations). Provision to request semiannual reporting after compliance for one year. Submit report by 30th day following end of quarter or calendar half. If there has not been an exceedance or excess emissions (now defined as deviations), report contents is a statement that there have been no deviations.</td>
<td>No. No. No.</td>
<td></td>
</tr>
</tbody>
</table>
§ 63.7980 What is the purpose of this subpart?

This subpart establishes national emission standards for hazardous air pollutants (NESHAP) for miscellaneous coating manufacturing. This subpart also establishes requirements to demonstrate initial and continuous compliance with the emission limits, operating limits, and work practice standards.

§ 63.7985 Am I subject to the requirements in this subpart?

(a) You are subject to the requirements in this subpart if you own or operate miscellaneous coating manufacturing operations, as defined in paragraph (b) of this section, that meet the conditions specified in paragraphs (a)(1) through (4) of this section.

(1) Are located at or are part of a major source of hazardous air pollutants (HAP) emissions, as defined in section 112(a) of the Clean Air Act (CAA).

(2) Manufacture coatings as defined in §63.8105.

(3) Process, use, or produce HAP.

(4) Are not part of an affected source under another subpart of this part 63.

(b) Miscellaneous coating manufacturing operations include the facilitywide collection of equipment described in paragraphs (b)(1) through (4) of this section that is used to manufacture coatings as defined in §63.8105. Miscellaneous coating manufacturing operations also include cleaning operations.

(1) Process vessels.

(2) Storage tanks for feedstocks and products.

(3) Components such as pumps, compressors, agitators, pressure relief devices, sampling connection systems, open-ended valves or lines, valves, connectors, and instrumentation systems.

(4) Wastewater tanks and transfer racks.

(c) If the predominant use of a transfer rack loading arm or storage tank (including storage tanks in series) is associated with miscellaneous coating manufacturing, and the loading arm or storage tank is not part of an affected source under a subpart of this part 63, then you must assign the loading arm or storage tank to the miscellaneous coating manufacturing operations. If the predominant use cannot be determined, and the loading arm or storage tank is not part of an affected source under a subpart of this part 63, then you must assign the loading arm or storage tank to the miscellaneous coating manufacturing operations. If
Environmental Protection Agency

§ 63.7995

the use varies from year to year, then you must base the determination on the utilization that occurred during the year preceding December 11, 2003 or, if the loading arm or storage tank was not in operation during that year, you must base the use on the expected use for the first 5-year period after startup. You must include the determination in the notification of compliance status report specified in § 63.8075(d). You must redetermine the predominant use at least once every 5 years after the compliance date.

(d) The requirements for miscellaneous coating manufacturing sources in this subpart do not apply to operations described in paragraphs (d)(1) through (5) of this section.

(1) Research and development facilities, as defined in section 112(c)(7) of the CAA.

(2) The affiliated operations located at an affected source under subparts GG (National Emission Standards for Aerospace Manufacturing and Rework Facilities), KK (National Emission Standards for the Printing and Publishing Industry), JJJJ (NESHAP: Paper and Other Web Coating), future MMMM (National Emission Standards for Miscellaneous Metal Parts and Products Surface Coating Operations) and SSSS (NESHAP: Surface Coating of Metal Coil) of 40 CFR part 63. Affiliated operations include, but are not limited to, mixing or dissolving of coating ingredients; coating mixing for viscosity adjustment, color tint or additive blending, or pH adjustment; cleaning of coating lines and coating line parts; handling and storage of coatings and solvent; and conveyance and treatment of wastewater.

(3) Ancillary equipment such as boilers and incinerators (only those not used to comply with the emission limits in Tables 1 through 5 to this subpart), chillers and refrigeration systems, and other equipment that is not directly involved in the manufacturing of a coating (i.e., it operates as a closed system, and materials are not combined with materials used to manufacture the coating).

(4) Quality assurance/quality control laboratories.

(5) Modifying a purchased coating in preparation for application at the purchasing facility.


§ 63.7990 What parts of my plant does this subpart cover?

(a) This subpart applies to each miscellaneous coating manufacturing affected source as defined in § 63.7965(a).

(b) The miscellaneous coating manufacturing affected source is the miscellaneous coating manufacturing operations as defined in § 63.7985(b).

(c) An affected source is a new affected source if you commenced construction or reconstruction after April 4, 2002, and you met the applicability criteria at the time you commenced construction or reconstruction.

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

Except as specified in § 63.8090, you must comply with this subpart according to the requirements of this section.

(a) If you have a new affected source, you must comply with this subpart according to the requirements in paragraphs (a)(1) and (2) of this section.

(1) If you start up your new affected source before December 11, 2003, then you must comply with the requirements for new sources in this subpart no later than December 11, 2003.

(2) If you start up your new affected source after December 11, 2003, then you must comply with the requirements for new sources in this subpart upon startup of your affected source.

(b) If you have an existing affected source on December 11, 2003, then you must comply with the requirements for existing sources in this subpart no later than December 11, 2006.

(c) [Reserved]

(d) You must meet the notification requirements in § 63.8070 according to the schedule in § 63.8070 and in 40 CFR part 63, subpart A. Some of the notifications must be submitted before you
are required to comply with the emission limits, operating limits, and work practice standards in this subpart.


EMISSION LIMITS, WORK PRACTICE STANDARDS, AND COMPLIANCE REQUIREMENTS

§ 63.8000 What are my general requirements for complying with this subpart?

(a) You must be in compliance with the emission limits and work practice standards in Tables 1 through 5 to this subpart at all times, except during periods of startup, shutdown, and malfunction. You must meet the requirements specified in paragraphs (b) and (c) of this section. You must meet the requirements specified in §§ 63.8005 through 63.8025 (or the alternative means of compliance in § 63.8050), except as specified in paragraph (d) of this section. You must meet the notification, reporting, and recordkeeping requirements specified in §§ 63.8070, 63.8075, and 63.8080.

(b) General requirements. (1) If an emission stream contains halogen atoms, and you use a combustion-based control device (excluding a flare) to meet an organic HAP emission limit, you must determine whether the emission stream meets the definition of a halogenated stream by calculating the concentration of each organic compound that contains halogen atoms using the procedures specified in § 63.115(d)(2)(v), multiplying each concentration by the number of halogen atoms in the organic compound, and summing the resulting halogen atom concentrations for all of the organic compounds in the emission stream. Alternatively, you may elect to designate the emission stream as halogenated.

(2) Opening of a safety device, as defined in § 63.8105, is allowed at any time conditions require it to avoid unsafe conditions.

(c) Compliance requirements for closed vent systems and control devices. If you use a control device to comply with an emission limit in Table 1, 2, or 5 to this subpart, you must comply with the requirements in subpart SS of 40 CFR part 63 as specified in paragraphs (c)(1) through (3) of this section, except as specified in paragraph (d) of this section.

1 If you reduce organic HAP emissions by venting emissions through a closed-vent system to any combination of control devices (except a flare), you must meet the requirements of § 63.982(c) and the requirements referenced therein.

(2) If you reduce organic HAP emissions by venting emissions through a closed-vent system to a flare, you must meet the requirements of § 63.982(b) and the requirements referenced therein. You may not use a flare to control halogenated vent streams or hydrogen halide and halogen HAP emissions.

(3) If you use a halogen reduction device to reduce hydrogen halide and halogen HAP emissions that are generated by combusting halogenated vent streams, you must meet the requirements of § 63.994 and the requirements referenced therein. If you use a halogen reduction device before a combustion device, you must determine the halogen atom emission rate prior to the combustion device according to the procedures in § 63.115(d)(2)(v).

(d) Exceptions to the requirements specified in other subparts of this part 63—(1) Requirements for performance tests. The requirements specified in paragraphs (d)(1)(i) through (v) of this section apply instead of or in addition to the requirements for performance testing of control devices as specified in subpart SS of 40 CFR part 63.

(i) Conduct gas molecular weight analysis using Method 3, 3A, or 3B in appendix A to 40 CFR part 60.

(ii) Measure moisture content of the stack gas using Method 4 in appendix A to 40 CFR part 60.

(iii) As an alternative to using Method 18, Method 25/25A, or Method 26/26A of 40 CFR part 60, appendix A, to comply with any of the emission limits specified in Tables 1 through 6 to this subpart, you may use Method 320 of 40 CFR part 60, appendix A. When using Method 320, you must follow the analyte spiking procedures of section 13 of Method 320, unless you demonstrate that the complete spiking procedure has been conducted at a similar source.
(iv) Section 63.997(c)(1) does not apply. For the purposes of this subpart, results of all initial compliance demonstrations must be included in the notification of compliance status report, which is due 150 days after the compliance date, as specified in §63.8075(d)(1).

(v) If you do not have a closed-vent system as defined in §63.981, you must determine capture efficiency using Method 204 of appendix M to 40 CFR part 51 for all stationary process vessels subject to requirements of Table 1 to this subpart.

(2) Design evaluation. To determine the percent reduction of a small control device, you may elect to conduct a design evaluation as specified in §63.1257(a)(1) instead of a performance test as specified in subpart SS of 40 CFR part 63. You must establish the value(s) and basis for the operating limits as part of the design evaluation.

(3) Periodic verification. For a control device with total inlet HAP emissions less than 1 ton per year (tpy), you must establish an operating limit(s) for a parameter(s) that you will measure and record at least once per averaging period (i.e., daily or block) to verify that the control device is operating properly. You may elect to measure the same parameter(s) that is required for control devices that control inlet HAP emissions equal to or greater than 1 tpy. If the parameter will not be measured continuously, you must request approval of your proposed procedure in the precompliance report. You must provide rationale to support how these measurements demonstrate the control device is operating properly.

(4) Continuous emissions monitoring systems. Each continuous emissions monitoring system (CEMS) must be installed, operated, and maintained according to the requirements in §63.8 and paragraphs (d)(4)(i) through (iv) of this section.

(i) Each CEMS must be installed, operated, and maintained according to the applicable Performance Specification of 40 CFR part 60, appendix B, and according to paragraph (d)(4)(ii) of this section, except as specified in paragraph (d)(4)(ii)(A) of this section. For any CEMS meeting Performance Specification 8, you must also comply with appendix F, procedure 1 of 40 CFR part 60.

(A) If you wish to use a CEMS other than a Fourier Transform Infrared Spectroscopy (FTIR) meeting the requirements of Performance Specification 15 to measure hydrogen halide and halogen HAP before we promulgate a Performance Specification for such CEMS, you must prepare a monitoring plan and submit it for approval in accordance with the procedures specified in §63.8.

(B) [Reserved]

(ii) You must determine the calibration gases and reporting units for TOC CEMS in accordance with paragraph (d)(4)(i)(A), (B), or (C) of this section.

(A) For CEMS meeting Performance Specification 9 or 15 requirements, determine the target analyte(s) for calibration using either process knowledge of the control device inlet stream or the screening procedures of Method 18 on the control device inlet stream.

(B) For CEMS meeting Performance Specification 8 used to monitor performance of a combustion device, calibrate the instrument on the predominant organic HAP and report the results as carbon (C\textsubscript{1}). Use Method 18, ASTM D6420–99, or any approved alternative as the reference method for the relative accuracy tests.

(C) For CEMS meeting Performance Specification 8 used to monitor performance of a noncombustion device, determine the predominant organic HAP using either process knowledge or the screening procedures of Method 18 on the control device inlet stream, calibrate the monitor on the predominant organic HAP, and report the results as C\textsubscript{1}. Use Method 18, ASTM D6420–99, or any approved alternative as the reference method for the relative accuracy tests, and report the results as C\textsubscript{1}.

(iii) You must conduct a performance evaluation of each CEMS according to the requirements in 40 CFR 63.8 and according to the applicable Performance Specification of 40 CFR part 60, appendix B, except that the schedule in §63.8(e)(4) does not apply, and the results of the performance evaluation must be included in the notification of compliance status report.
(iv) The CEMS data must be reduced to operating day or operating block averages computed using valid data consistent with the data availability requirements specified in §63.999(c)(6)(i)(B) through (D), except monitoring data also are sufficient to constitute a valid hour of data if measured values are available for at least two of the 15-minute periods during an hour when calibration, quality assurance, or maintenance activities are being performed. An operating block is a period of time from the beginning to end of batch operations in the manufacturing of a coating. Operating block averages may be used only for process vessel data.

(5) Continuous parameter monitoring. The provisions in paragraphs (d)(5)(i) through (iii) of this section apply in addition to the requirements for continuous parameter monitoring system (CPMS) in subpart SS of 40 CFR part 63.

(i) You must record the results of each calibration check and all maintenance performed on the CPMS as specified in §63.998(c)(1)(ii)(A).

(ii) When subpart SS of 40 CFR part 63 uses the term a range or operating range of a monitored parameter, it means an operating limit for a monitored parameter for the purposes of this subpart.

(iii) As an alternative to measuring pH as specified in §63.994(c)(1)(i), you may elect to continuously monitor the caustic strength of the scrubber effluent.

(6) Startup, shutdown, and malfunction. Sections 63.999(b)(2)(iiii) and (b)(6)(i)(A), which apply to the exclusion of monitoring data collected during periods of startup, shutdown, and malfunction (SSM) from daily averages, do not apply for the purposes of this subpart.

(7) Reporting. (i) When §§63.8005 through 63.8025 reference other subparts in this part 63 that use the term periodic report, it means compliance report for the purposes of this subpart.

(ii) When there are conflicts between this subpart and referenced subparts for the due dates of reports required by this subpart, reports must be submitted according to the due dates presented in this subpart.

(iii) Excused excursions, as defined in subpart SS of 40 CFR part 63, are not allowed.

§63.8005 What requirements apply to my process vessels?

(a) General. (1) You must meet each emission limit and work practice standard in Table 1 to this subpart that applies to you, and you must meet each applicable requirement specified in §63.8000(b), except as specified in paragraphs (a)(1)(i) and (ii) of this section.

(ii) You are not required to meet the emission limits and work practice standards in Table 1 to this subpart if you comply with §63.8050 or §63.8055.

(ii) You must meet the emission limits and work practice standards in Table 1 to this subpart if you comply with §63.8050 or §63.8055.

(b) When subpart SS of this part 63 refers to process vents, it means process vessel vents for the purposes of this section.

(c) Process condensers, as defined in §63.1251, are not considered to be control devices for process vessels.

(d) Initial compliance. (1) To demonstrate initial compliance with a percent reduction emission limit in Table 1 to this subpart, you must conduct the performance test or design evaluation under conditions as specified in §63.7(e)(1), except that the performance test or design evaluation must be conducted under worst-case conditions. Also, the performance test for a control device used to control emissions from process vessels must be conducted according to §63.1257(b)(8), including the submittal of a site-specific test plan for approval prior to testing. The requirements in §63.997(e)(1)(i) and (iii) also do not apply for performance tests.
conducted to determine compliance with the emission limits for process vessels.

(2) For the initial compliance demonstration for condensers, you must determine uncontrolled emissions using the procedures specified in §63.1257(d)(2), and you must determine controlled emissions using the procedures specified in §63.1257(d)(3)(i)(B) and (iii).

(3) You must demonstrate that each process condenser is properly operated according to the procedures specified in §63.1257(d)(3)(iii)(B). The reference in §63.1257(d)(3)(iii)(B) to the alternative standard in §63.1254(c) does not apply for the purposes of this subpart. As an alternative to measuring the exhaust gas temperature, as required by §63.1257(d)(3)(iii)(B), you may elect to measure the liquid temperature in the receiver.

(4) You must conduct a performance test or compliance demonstration equivalent to an initial compliance demonstration within 360 hours of a change in operating conditions that are not considered to be within the previously established worst-case conditions.

(e) Establishing operating limits. You must establish operating limits under the conditions required for your initial compliance demonstration, except you may elect to establish operating limit(s) for conditions other than those under which a performance test was conducted as specified in paragraph (e)(1) of this section and, if applicable, paragraph (e)(2) of this section.

(1) The operating limits may be based on the results of the performance test and supplementary information such as engineering assessments and manufacturer’s recommendations. These limits may be established for conditions as unique as individual emission episodes. You must provide rationale in the precompliance report for the specific level for each operating limit, including any data and calculations used to develop the limit and a description of why the limit indicates proper operation of the control device. The procedures provided in this paragraph (e)(1) have not been approved by the Administrator and determination of the operating limit using these procedures is subject to review and approval by the Administrator.

(2) If you elect to establish separate operating limits for different emission episodes, you must maintain records as specified in §63.998(b)(3) of each point at which you change from one operating limit to another, even if the duration of the monitoring for an operating limit is less than 15 minutes.

(f) Averaging periods. If you elect to establish separate operating limits for different emission episodes, you may elect to determine operating block averages instead of the daily averages specified in §63.998(b)(3). An operating block is a period of time that is equal to the time from the beginning to end of an emission episode or sequence of emission episodes.

(g) Flow indicators. If flow to a control device could be intermittent, you must install, calibrate, and operate a flow indicator at the inlet or outlet of the control device to identify periods of no flow. Periods of no flow may not be used in daily or block averages, and it may not be used in fulfilling a minimum data availability requirement.

§63.8000 Enforcement procedures.

§63.8010 What requirements apply to my storage tanks?

(a) You must meet each emission limit in Table 2 to this subpart that applies to your storage tanks, and you must meet each applicable requirement specified in §63.8000(b). For each control device used to comply with Table 2 to this subpart, you must comply with subpart SS of this part 63 as specified in §63.8000(c), except as specified in §63.8000(d) and paragraphs (b) through (d) of this section.

(b) Exceptions to subparts SS and WW of this part 63. (1) If you conduct a performance test or design evaluation for a control device used to control emissions only from storage tanks, you must establish operating limits, conduct monitoring, and keep records using the same procedures as required in subpart SS of this part 63 for control devices used to reduce emissions from process vents instead of the procedures specified in §§63.995(c), 63.999(d)(2)(i), and 63.999(b)(2).
(2) When the term storage vessel is used in subparts SS and WW of this part 63, the term storage tank, as defined in §63.8105 applies for the purposes of this subpart.

(c) Planned routine maintenance. The emission limits in Table 2 to this subpart for control devices used to control emissions from storage tanks do not apply during periods of planned routine maintenance. Periods of planned routine maintenance of each control device, during which the control device does not meet the emission limit specified in Table 2 to this subpart, must not exceed 240 hours per year (hr/yr). You may submit an application to the Administrator requesting an extension of this time limit to a total of 360 hr/yr. The application must explain why the extension is needed, it must indicate that no material will be added to the storage tank between the time the 240 hr/yr limit is exceeded and the control device is again operational, and it must be submitted at least 60 days before the 240 hr/yr limit will be exceeded.

(d) Vapor balancing alternative. As an alternative to the emission limits specified in Table 2 to this subpart, you may elect to implement vapor balancing in accordance with §63.1253(f), except as specified in paragraphs (d)(1) and (2) of this section.

1) To comply with §63.1253(f)(6)(i), the owner or operator of an offsite cleaning and reloading facility must comply with §§63.7995 through 63.8105 instead of complying with §63.1253(f)(7)(ii).

2) You may elect to set a pressure relief device to a value less than the 2.5 psig required in §63.1253(f)(5) if you provide rationale in your notification of compliance status report explaining why the alternative value is sufficient to prevent breathing losses at all times.

§63.8020 What requirements apply to my wastewater streams?

(a) You must meet each requirement in Table 4 to this subpart that applies to your wastewater streams, and you must meet each applicable requirement specified in §63.8000 and paragraphs (b) through (d) of this section.

(b) You must meet each requirement in Table 4 to this subpart that applies to your wastewater streams, and you must meet each applicable requirement specified in §63.8000 and paragraphs (b) through (d) of this section.

(c) You must meet each requirement in Table 4 to this subpart that applies to your wastewater streams, and you must meet each applicable requirement specified in §63.8000 and paragraphs (b) through (d) of this section.

(d) You must meet each requirement in Table 4 to this subpart that applies to your wastewater streams, and you must meet each applicable requirement specified in §63.8000 and paragraphs (b) through (d) of this section.

(e) You must meet each requirement in Table 4 to this subpart that applies to your wastewater streams, and you must meet each applicable requirement specified in §63.8000 and paragraphs (b) through (d) of this section.

(f) You must meet each requirement in Table 4 to this subpart that applies to your wastewater streams, and you must meet each applicable requirement specified in §63.8000 and paragraphs (b) through (d) of this section.

§63.8015 What requirements apply to my equipment leaks?

(a) You must meet each requirement in Table 3 to this subpart that applies to your equipment leaks, except as specified in paragraphs (b) through (d) of this section.

(b) Exceptions to requirements in §63.424(a). (1) When §63.424(a) refers to "a bulk gasoline terminal or pipeline breakout station subject to the provisions of this subpart," the phrase "a miscellaneous coating manufacturing affected source subject to 40 CFR part 63, subpart HHH HHH" shall apply for the purposes of this subpart.

(2) When §63.424(a) refers to "equipment in gasoline service," the phrase "equipment in organic HAP service" shall apply for the purposes of this subpart.

(3) When §63.424(a) specifies that "each piece of equipment shall be inspected during loading of a gasoline cargo tank," the phrase "each piece of equipment must be inspected when it is operating in organic HAP service" shall apply for the purposes of this subpart.

(4) Equipment in service less than 300 hours per year, equipment in vacuum service, or equipment contacting non-process fluids is excluded from this section.

(c) When §63.1036 refers to batch processes, any part of the miscellaneous coating manufacturing operations applies for the purposes of this subpart.

(d) For the purposes of this subpart, pressure testing for leaks in accordance with §63.1036(b) is not required after reconfiguration of an equipment train if flexible hose connections are the only disturbed equipment.

[68 FR 69185, Dec. 11, 2003, as amended at 70 FR 25681, May 13, 2005]
§ 63.8050 How do I comply with emissions averaging for stationary process vessels at existing sources?

(a) As an alternative to complying with the requirements specified in Table 1 to this subpart, you may obtain written certification from the offsite facility stating that the offsite facility will comply with the requirements of this subpart. The certifying entity may revoke the certification by providing 90 days notice. Upon expiration of the notice period, you may not transfer wastewater to that treatment facility.

§ 63.8025 What requirements apply to my transfer operations?

(a) You must comply with each emission limit and work practice standard in Table 5 to this subpart that applies to your transfer operations, and you must meet all applicable requirements specified in § 63.8000(b). For each control device used to comply with Table 5 to this subpart, you must comply with subpart SS of this part 63 as specified in § 63.8000(c), except as specified in § 63.8000(d) and paragraph (b) of this section.

(b) If you have Group 1 transfer operations, as defined in § 63.8105, then all transfer racks used for bulk loading coatings must meet the requirements for high throughput transfer racks in subpart SS of this part.

§ 63.8030 What requirements apply to my heat exchange systems?

(a) You must comply with the requirements specified in Table 6 to this subpart that apply to your heat exchange systems, except as specified in paragraphs (b) through (e) of this section.

(b) The phrase a chemical manufacturing process unit meeting the conditions of § 63.100(b)(1) through (b)(3) of this section in § 63.104(a) means the miscellaneous coating manufacturing operations defined in § 63.7985(b) for the purposes of this subpart.

(c) The reference to § 63.100(c) in § 63.104(a) does not apply for the purposes of this subpart.

(d) The reference to § 63.103(c)(1) in § 63.104(f)(1) does not apply. For the purposes of this subpart, records must be retained as specified in § 63.10(b)(1).

(e) The reference to the periodic report required by § 63.152(c) of subpart G of this part means the compliance report required by § 63.8075(e) for the purposes of this subpart.

ALTERNATIVE MEANS OF COMPLIANCE

§ 63.8050 How do I comply with emissions averaging for stationary process vessels at existing sources?

(a) As an alternative to complying with the requirements in Table 1 to
this subpart for each individual stationary process vessel, you may elect to comply with emissions averaging for stationary process vessels greater than or equal to 250 gallons (gal) at your existing affected source as specified in paragraphs (b) through (e) of this section.

(b) General requirements. (1) A State may prohibit averaging of HAP emissions and require the owner or operator of an existing affected source to comply with the emission limits and work practice standards in Table 1 to this subpart.

(2) All stationary process vessels in an emissions averaging group must be equipped with a tightly-fitting vented cover.

(c) Initial compliance. To demonstrate initial compliance with the emissions averaging alternative, you must comply with the provisions in paragraphs (c)(1) through (4) of this section.

(1) Estimate uncontrolled emissions from each affected stationary process vessel in pounds per batch using the procedures specified in §63.1257(d)(2), except as specified in paragraphs (c)(1)(i) and (ii) of this section. For the purposes of this section, uncontrolled emissions means the emissions from the vessel if it were equipped only with a tightly-fitting vented cover. You must identify the range of typical operating parameters and perform the calculation using the values that result in the highest emissions, and you must document the operating parameters and resulting emissions calculations in the precompliance report.

(i) When you are required to calculate uncontrolled emissions from heating, you may not calculate emissions using Equation 13 of subpart GGG of this part 63.

(ii) The statement in §63.1257(d)(2)(i)(B) that “the partial pressure of HAP shall be assumed to be 25 percent of the saturated value if the purge flow rate is greater than 100 scfm” does not apply. For the purposes of this subpart, multiply the HAP partial pressure in Equation 12 of 40 CFR part 63, subpart GGG by a HAP-specific saturation factor determined in accordance with Equations 1 through 3 of this section. Solve equation 1 of this section iteratively beginning with saturation factors (in the right-hand side of the equation) of 1.0 for each condensable compound. Stop iterating when the calculated saturation factors for all compounds are the same to two significant figures for subsequent iterations. Note that for multi-component emission streams, saturation factors must be calculated for all condensable compounds, not just the HAP.

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S_i = \frac{K_i A}{V_{P_i}} \quad \text{Eq. 1}
\]

\[
V_{i_{sat}} = \frac{VP_i}{P_{T - \sum_{i=1}^{n} P_i}} \quad \text{Eq. 2}
\]

\[
K_i = K_o \left( \frac{M_o}{M_i} \right)^{1/3} \quad \text{Eq. 3}
\]

where:

- \( S_i \) = saturation factor for individual condensable compounds in the emission stream
- \( P_i \) = partial pressure of individual condensable compounds in the emission stream calculated using Raoult’s Law or other appropriate methods
- \( P_T \) = pressure of the vessel vapor space
- \( A \) = surface area of liquid
- \( V \) = purge flow rate as used in Equation 12 of 40 CFR part 63, subpart GGG
- \( V_{i_{sat}} \) = volumetric flowrate of condensable compounds in the emission stream
- \( K_i \) = mass transfer coefficient of individual condensable compounds in the emission stream
- \( K_o \) = mass transfer coefficient of a reference compound (e.g., 0.83 cm/s for water)
- \( M_o \) = molecular weight of reference compound (e.g., 18.02 for water)
- \( M_i \) = molecular weight of individual condensable compounds in the emission stream
- \( n \) = number of condensable compounds in the emission stream

(2) Estimate controlled emissions in pounds per batch for each vessel as specified in paragraphs (c)(2)(i) through (iii) of this section.

(i) Except as specified in paragraphs (c)(2)(ii) and (iii) of this section, estimate controlled emissions as if the vessel were controlled in compliance with entry 2.b.i. in Table 1 to this subpart.

(ii) Estimate the controlled emissions using the control level achieved on November 15, 1990 if that value is
greater than the applicable control level required by entry 2.b.1 in Table 1 to this subpart.

(iii) Estimate the controlled emissions using the control level required to comply with a State or Federal rule other than this subpart if that level is greater than the applicable control level required by entry 2.b.1 in Table 1 to this subpart and the other rule was in effect before the date when you request approval to comply with emissions averaging.

(3) Determine actual emissions in pounds per batch for each vessel in accordance with paragraph (c)(3)(i), (ii), or (iii) of this section, as applicable.

(4) Provide rationale in the precompliance report for why the sum of the actual emissions will be less than the sum of emissions from the vessels if they had been controlled in accordance with Table 1 to this subpart. The approved actual emissions calculated according to paragraph (c)(3) of this section are emission limits that must be incorporated into your operating permit.

(d) Continuous compliance. (1) Maintain a monthly log of the number of batches produced that can be correlated with the emissions estimates per batch developed in accordance with paragraph (c) of this section.

(2) Sum the actual emissions for all of the process vessels in the emissions averaging group every three months, with the first 3-month period beginning on the compliance date, and compare the resulting total with the total emissions for the vessels calculated in accordance with paragraph (c)(2) of this section. Compliance is demonstrated if the sum of the actual emissions is less than the emissions estimated in accordance with paragraph (c)(2) of this section.

(3) For control devices, establish operating limits and monitor as specified in §63.8000.

(e) Recordkeeping and reporting. Comply with §§63.8070, 63.8075, and 63.8080.

§63.8055 How do I comply with a weight percent HAP limit in coating products?

(a) As an alternative to complying with the requirements in Table 1 to this subpart for each individual stationary process vessel at an existing source, you may elect to comply with a 5 weight percent HAP limit for process vessels at your affected source that are used to manufacture coatings with a HAP content of less than 0.05 kg per kg product as specified in paragraph (b) of this section.

(b) You may only comply with the alternative during the production of coatings that contain less than 5 weight percent HAP, as determined using any of the procedures specified in paragraphs (b)(1) through (4) of this section.

(1) Method 311 (appendix A to 40 CFR part 63).

(2) Method 24 (appendix A to 40 CFR part 60). You may use Method 24 to determine the mass fraction of volatile matter and use that value as a substitute for the mass fraction of HAP.

(3) You may use an alternative test method for determining mass fraction of HAP if you obtain prior approval by the Administrator. You must follow the procedure in §63.7(f) to submit an alternative test method for approval.

(4) You may rely on formulation data from raw material suppliers if it represents each organic HAP that is present at 0.1 percent by mass or more for OSHA-defined carcinogens, as specified in 29 CFR 1910.1200(d)(4), and at 1.0 percent by mass or more for other compounds. If the HAP weight percent estimated based on formulation data conflicts with the results of a test conducted according to paragraphs (b)(1) through (3) of this section, then there is a rebuttal presumption that the test results are accurate unless, after consultation, you demonstrate to the satisfaction of the permitting authority that the test results are not accurate and that the formulation data are more appropriate.
§ 63.8070

NOTIFICATION, REPORTS, AND RECORDS

§ 63.8070 What notifications must I submit and when?

(a) You must submit all of the notifications in §§ 63.6(h)(4) and (5), 63.7(b) and (c), 63.8(e), (f)(4) and (6), 63.9(b) through (h) that apply to you by the dates specified.

(b) Initial notification. (1) As specified in §63.9(b)(2), if you have an existing affected source on December 11, 2003, you must submit an initial notification not later than 120 calendar days after December 11, 2003.

(2) As specified in §63.9(b)(3), if you start up your new affected source on or after December 11, 2003, you must submit an initial notification not later than 120 calendar days after you become subject to this subpart.

(c) Notification of performance test. If you are required to conduct a performance test, you must submit a notification of intent to conduct a performance test at least 60 calendar days before the performance test is scheduled to begin as required in §63.7(b)(1). For any performance test required as part of the initial compliance procedures for process vessels in Table 1 to this subpart, you must also submit the test plan required by §63.7(c) and the emission profile with the notification of the performance test.

§ 63.8075 What reports must I submit and when?

(a) You must submit each report in Table 9 to 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 as specified in Table 9 to this subpart and paragraphs (b)(1) and (2) of this section.

(1) The compliance reports must be submitted semiannually. The first report must be submitted no later than 240 days after the applicable compliance date and shall cover the 6-month period beginning on the compliance date. Each subsequent compliance report must cover the 6-month period following the preceding period.

(2) For each affected source that is subject to permitting regulations pursuant to 40 CFR part 70 or 40 CFR part 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 Table 9.

(c) Precompliance report. You must submit a precompliance report to request approval of any of the information in paragraphs (c)(1) through (4) of this section. We will either approve or disapprove the report within 90 days after we receive it. If we disapprove the report, you must still be in compliance with the emission limitations and work practice standards in this subpart by the compliance date.

(1) Requests for approval to set operating limits for parameters other than those specified in §§63.8005 through 63.8025, including parameters for enhanced biological treatment units. Alternatively, you may make these requests according to §63.8(f).

(2) Descriptions of daily or per batch demonstrations to verify that control devices subject to §63.8000(d)(3) are operating as designed.

(3) A description of the test conditions, data, calculations, and other information used to establish operating limits according to §63.8005(e)(1).

(4) If you comply with emissions averaging in §63.8050, the data and results of emission calculations as specified in §63.8050(c)(1) through (3), and rationale for why the sum of actual emissions will be less than the sum of emissions if the process vessels were controlled in accordance with Table 1 to this subpart as specified in §63.8050(c)(4).

(d) Notification of compliance status report. You must submit a notification of compliance status report according to the schedule in paragraph (d)(2) of this section, and the notification of compliance status report must include the information specified in paragraph (d)(2) of this section.

(1) You must submit the notification of compliance status report no later than 150 days after the applicable compliance date specified in §63.7995.
(2) The notification of compliance status report must include the information in paragraphs (d)(3)(i) through (vi) of this section.

(i) The results of any applicability determinations (e.g., HAP content of coating products; halogenated vent stream determinations; group determinations for storage tanks, wastewater, and transfer operations; and equipment that is in organic HAP service).

(ii) The results of performance tests, engineering analyses, design evaluations, flare compliance assessments, inspections and repairs, and calculations used to demonstrate initial compliance according to §§63.8005 through 63.8025 and 63.8055. For performance tests, results must include descriptions of sampling and analysis procedures and quality assurance procedures.

(iii) Descriptions of monitoring devices, monitoring frequencies, and the operating limits established during the initial compliance demonstrations, including data and calculations to support the levels you establish.

(iv) Identification of parts of the affected source that are subject to overlapping requirements described in §63.8090 and the authority under which you will comply.

(v) Identify storage tanks for which you are complying with the vapor balancing alternative in §63.8010(e).

(vi) If you transfer Group 1 wastewater stream to an offsite facility for treatment, include the name and location of the transferee and a description of the Group 1 wastewater stream that is sent to the treatment facility. If the offsite facility provides enhanced biological treatment, also include the certification required by §63.8020(d) that the offsite facility will comply with the requirements of this subpart.

(e) Compliance report. The compliance report must contain the information specified in paragraphs (e)(1) through (8) of this section.

(1) Company name and address.

(2) Statement by a responsible official with that official’s name, title, and signature, certifying the accuracy of the content of the report.

(3) Date of report and beginning and ending dates of the reporting period.

(4) Applicable records and information for periodic reports as specified in referenced subparts F, SS, TT, UU, and WW of this part 63.

(5) For each SSM during which excess emissions occur, the compliance report must include the information specified in paragraphs (e)(5)(i) and (ii) of this section.

(i) Records that the procedures specified in your startup, shutdown, and malfunction plan (SSMP) were followed or documentation of actions taken that are not consistent with the SSMP.

(ii) A description of each malfunction.

(6) The compliance report must contain the information on deviations, as defined in §63.8105, according to paragraphs (e)(6)(i), (ii), and (iii) of this section.

(i) If there are no deviations from any emission limit, operating limit, or work practice standard specified in this subpart, include a statement that there were no deviations from the emission limits, operating limits, or work practice standards during the reporting period.

(ii) For each deviation from an emission limit, operating limit, and work practice standard that occurs at an affected source where you are not using a continuous monitoring system (CMS) to comply with the emission limit or work practice standards in this subpart, you must include the information in paragraphs (e)(6)(ii)(A) through (C) of this section.

(A) The total operating time of each affected source during the reporting period.

(B) Information on the number, duration, and cause of deviations (including unknown cause, if applicable), as applicable, and the corrective action taken.

(C) Operating logs for the day(s) during which the deviation occurred, except operating logs are not required for deviations of the work practice standards for equipment leaks.

(iii) For each deviation from an emission limit or operating limit occurring at an affected source where you are using a CMS to comply with the emission limit in this subpart, you must include the information in paragraphs...
(e)(6)(iii)(A) through (K) of this section. This includes periods of SSM.

(A) The date and time that each CMS was inoperative, except for zero (low-level) and high-level checks.

(B) The date, time, and duration that each CEMS was out-of-control, including the information in §63.8(c)(7).

(C) The date and time that each deviation started and stopped, and whether each deviation occurred during a period of startup, shutdown, or malfunction or during another period.

(D) 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.

(E) A breakdown of the total duration of the deviations during the reporting period into those that are due to startup, shutdown, control equipment problems, process problems, other known causes, and other unknown causes.

(F) 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 source operating time during that reporting period.

(G) An identification of each HAP that is known to be in the emission stream or wastewater stream, as applicable.

(H) A description of the product being produced.

(I) Identification of the CMS.

(J) The date of the latest CMS certification or audit.

(K) The operating day or operating block average values of monitored parameters for each day(s) during which the deviation occurred.

(7) If you use a CEMS, and there were no periods during which it was out-of-control as specified in §63.8(c)(7), include a statement that there were no periods during which the CEMS was out-of-control during the reporting period.

(8) Notification of process change. (i) Except as specified in paragraph (e)(8)(ii) of this section, whenever you change any of the information submitted in either the notification of compliance status report or any previously reported change to the notification of compliance status report, you must document the change in your compliance report. The notification must include all of the information in paragraphs (e)(8)(i)(A) and (B) of this section.

(A) Revisions to any of the information reported in the original notification of compliance status report under paragraph (d) of this section.

(B) Information required by the notification of compliance status report under paragraph (d) of this section for changes involving the addition of processes or equipment at the affected source.

(ii) You must submit a report 60 days before the scheduled implementation date of any of the changes identified in paragraphs (e)(8)(ii)(A), (B), or (C) of this section.

(A) Any change to the information contained in either the precompliance report or any previously reported change to the precompliance report.

(B) A change in the status of a control device from small to large.

(C) A change in compliance status.

§ 63.8080 What records must I keep?

You must keep the records specified in paragraphs (a) through (g) of this section.

(a) Each applicable record required by subpart A of this part 63 and in referenced subparts SS, TT, UU, and WW of this part 63.

(b) If complying with emissions averaging, records of the monthly number of batches for each process vessel, the quarterly actual emissions for each process vessel, the quarterly estimated emissions for each process vessel if it had been controlled as specified in Table 1 to this subpart, and comparison of the sums of the quarterly actual and estimated emissions as specified in §63.8050(d).

(c) A record of each time a safety device is opened to avoid unsafe conditions in accordance with §63.8000(b)(2).

(d) Records of the results of each CPMS calibration check and the maintenance performed, as specified in §63.8000(d)(5).

(e) For each CEMS, you must keep the records of the date and time that each deviation started and stopped, and whether the deviation occurred during
a period of startup, shutdown, or malfunction or during another period.

(f) In the SSMP required by §63.6(e)(3), you are not required to include Group 2 or non-affected emission points. For equipment leaks only, the SSMP requirement is limited to control devices and is optional for other equipment.

(g) If you establish separate operating limits as allowed in §63.8005(e), you must maintain a log of operation or a daily schedule indicating the time when you change from one operating limit to another.

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?

(a) Compliance with 40 CFR parts 264 and 265, subparts AA, BB, and/or CC. (1) After the compliance dates specified in §63.7995, if a control device that you use to comply with this subpart is also subject to monitoring, recordkeeping, and reporting requirements in 40 CFR part 264, subpart AA, BB, or CC; or the monitoring and recordkeeping requirements in 40 CFR part 265, subpart AA, BB, or CC; and you comply with the periodic reporting requirements under 40 CFR part 264, subpart AA, BB, or CC that would apply to the device if your facility had final-permitted status, you may elect to comply either with the monitoring, recordkeeping, and reporting requirements of this subpart; or with the monitoring and recordkeeping requirements in 40 CFR part 264 or 265 and the reporting requirements in 40 CFR part 264, as described in this paragraph (a), which constitute compliance with the monitoring, recordkeeping, and reporting requirements of this subpart. If you elect to comply with the monitoring, recordkeeping, and reporting requirements in 40 CFR parts 264 and/or 265, you must report the information required for the compliance report in §63.8075(e), and you must identify in the notification of compliance status report required by §63.8075(d) the monitoring, recordkeeping, and reporting authority under which you will comply.

(2) After the compliance dates specified in this section, if any equipment at an affected source that is subject to this subpart is also subject to 40 CFR part 264, subpart BB or to 40 CFR part 265, subpart BB, then compliance with the recordkeeping and reporting requirements of 40 CFR part 264 and/or 265 may be used to comply with the recordkeeping and reporting requirements of §63.1235, to the extent that the requirements of 40 CFR part 264 and/or 265 duplicate the requirements of this subpart. You must identify in the notification of compliance status report required by §63.8075(d) if you will comply with the recordkeeping and reporting authority under 40 CFR part 264 and/or 265.

(b) Compliance with 40 CFR part 60, subpart Kb. After the compliance dates specified in §63.7995, you are in compliance with this subpart for any storage tank that is assigned to miscellaneous coating manufacturing operations and that is both controlled with a floating roof and in compliance with the provisions of 40 CFR part 60, subpart Kb. You are in compliance with this subpart if you have a storage tank with a fixed roof, closed-vent system, and control device in compliance with 40 CFR part 60, subpart Kb. You must also identify in your notification of compliance status report required by §63.8075(d) which storage tanks are in compliance with 40 CFR part 60, subpart Kb.

(c) Compliance with 40 CFR part 63, subpart FFFF. After the compliance dates specified in §63.7995, an affected source under this subpart HHHHH that includes equipment that is also part of an affected source under 40 CFR part 63, subpart FFFF is deemed in compliance with this subpart HHHHH if all of the conditions specified in paragraphs (c)(1) through (5) of this section are met.

(1) Equipment used for both miscellaneous coating manufacturing operations and as part of a miscellaneous organic chemical manufacturing process unit (MCPU), as defined in §63.2435, must be part of a process unit group developed in accordance with the provisions in §63.2535(1).
(2) For the purposes of complying with §63.2535(1), a miscellaneous coating manufacturing ‘‘process unit’’ consists of all coating manufacturing equipment that is also part of an MCPU in the process unit group. All miscellaneous coating manufacturing operations that are not part of a process unit group must comply with the requirements of this subpart.

(3) The primary product for a process unit group that includes miscellaneous coating manufacturing equipment must be organic chemicals as described in §63.2435(b)(1).

(4) The process unit group must be in compliance with the requirements in 40 CFR part 63, subpart FFFF as specified in §63.2535(l)(3)(i) no later than the applicable compliance dates specified in §63.2445.

(5) You must include in the notification of compliance status report required in §63.8070(d) the records as specified in §63.2535(l)(1) through (3).

§ 63.8095 What parts of the General Provisions apply to me?

Table 10 to this subpart shows which parts of the General Provisions in §§63.1 through 63.15 apply to you.

§ 63.8100 Who implements and enforces this subpart?

(a) This subpart can be implemented and enforced by us, the U.S. Environmental Protection Agency (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 also has the authority to implement and enforce this subpart. You should contact your U.S. EPA Regional Office to find out if 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 paragraphs (b)(1) through (4) of this section are retained by the Administrator of U.S. EPA and are not delegated to the State, local, or tribal agency.

(1) Approval of alternatives to the non-opacity emission limits and work practice standards in §63.8000(a) under §63.6(g).

(2) Approval of major alternatives to test methods under §63.7(e)(2)(i) 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.

§ 63.8105 What definitions apply to this subpart?

(a) For an affected source complying with the requirements in subpart SS of this part 63, the terms used in this subpart and in subpart SS of this part 63 have the meaning given them in §63.981, except as specified in §§63.8000(d)(5)(ii) and (7), 63.8010(c)(2), 63.8025(b), and paragraph (g) of this section.

(b) For an affected source complying with the requirements in subpart TT of this part 63, the terms used in this subpart and in subpart TT of this part 63 have the meaning given them in §63.1001.

(c) For an affected source complying with the requirements in subpart UU of this part 63, the terms used in this subpart and in subpart UU of this part 63 have the meaning given them in §63.1020.

(d) For an affected source complying with the requirements in subpart WW of this part 63, the terms used in this subpart and in subpart WW of this part 63 have the meaning given them in §63.1061, except as specified in §§63.8000(d)(7), 63.8010(c)(2), and paragraph (g) of this section.

(e) For an affected source complying with requirements in §§63.1253, 63.1257, and 63.1258, the terms used in this subpart and in §§63.1253, 63.1257, and 63.1258 have the meaning given them in §63.1251, except as specified in §§63.8000(d)(7) and paragraph (g) of this section.

(f) For an affected source complying with the requirements of §63.104, the terms used in this subpart and in §63.104 have the meaning given them in §63.101, except as specified in
§ 63.8000(d)(7) and paragraph (g) of this section.

(g) All other terms used in this subpart are defined in the CAA, in 40 CFR 63.2, and in this paragraph (g). If a term is defined in § 63.2, § 63.981, § 63.1001, § 63.1020, § 63.1061, or § 63.1251 and in this paragraph (g), the definition in this paragraph (g) applies for the purposes of this subpart.

Bulk loading means the loading, into a tank truck or rail car, of liquid coating products that contain one or more of the organic HAP, as defined in section 112 of the CAA, from a loading rack. A loading rack is the system used to fill tank trucks and railcars at a single geographic site.

Coating means a material such as paint, ink, or adhesive that is intended to be applied to a substrate and consists of a mixture of resins, pigments, solvents, and/or other additives, where the material is produced by a manufacturing operation where materials are blended, mixed, diluted, or otherwise formulated. Coating does not include materials made in processes where a formulation component is synthesized by chemical reaction or separation activity and then transferred to another vessel where it is formulated into a coating, where the synthesized or separated component is not stored prior to formulation. Typically, coatings include products described by the following North American Industry Classification System (NAICS) codes, code 325510, Paint and Coating Manufacturing, code 325520, Adhesive and Sealant Manufacturing, and code 325910, Ink Manufacturing.

Construction means the onsite fabrication, erection, or installation of an affected source. Addition of new equipment to an affected source does not constitute construction, but it may constitute reconstruction of the affected source if it satisfies the definition of reconstruction in § 63.2.

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 limit, operating limit, 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 emission limit, operating limit, or work practice standard in this subpart during startup, shutdown, or malfunction, regardless of whether or not such failure is permitted by this subpart.

Enhanced biological treatment system means an aerated, thoroughly mixed treatment unit(s) that contains biomass suspended in water followed by a clarifier that removes biomass from the treated water and recycles recovered biomass to the aeration unit. The mixed liquor volatile suspended solids (biomass) is greater than 1 kilogram per cubic meter throughout each aeration unit. The biomass is suspended and aerated in the water of the aeration unit(s) either by submerged airflow or mechanical agitation. A thoroughly mixed treatment unit is a unit that is designed and operated to approach or achieve uniform biomass distribution and organic compound concentration throughout the aeration unit by quickly dispersing the recycled biomass and the wastewater entering the unit.

Excess emissions means emissions greater than those allowed by the emission limit.

Group 1a storage tank means a storage tank at an existing source with a capacity greater than or equal to 20,000 gal storing material that has a maximum true vapor pressure of total organic HAP greater than or equal to 1.9 pounds per square inch, absolute (psia). Group 1a storage tank also means a storage tank at a new source with either a capacity greater than or equal to 25,000 gal storing material that has a maximum true vapor pressure of total HAP greater than or equal to 0.1 psia or a capacity greater than or equal to 20,000 gal and less than 25,000 gal storing material that has a maximum true vapor pressure of total HAP greater than or equal to 1.5 psia.
§ 63.8105  

Group 1b storage tank means a storage tank at a new source that has a capacity greater than or equal to 10,000 gal, stores material that has a maximum true vapor pressure of total organic HAP greater than or equal to 0.02 psia, and is not a Group 1a storage tank.

Group 2 storage tank means a storage tank that does not meet the definition of a Group 1a or Group 1b storage tank.

Group 1 transfer operations means all bulk loading of coating products if the coatings contain greater than or equal to 3.0 million gallons per year (gal/yr) of HAP with a weighted average HAP partial pressure greater than or equal to 1.5 psia.

Group 2 transfer operations means bulk loading of coating products that does not meet the definition of Group 1 transfer operations, and all loading of coating products from a loading rack to other types of containers such as cans, drums, and totes.

Group 1 wastewater stream means a wastewater stream that contains total partially soluble and soluble HAP at an annual average concentration greater than or equal to 4,000 parts per million by weight (ppmw) and load greater than or equal to 750 pounds per year (lb/yr) at an existing source or greater than or equal to 1,600 ppmw and any partially soluble and soluble HAP load at a new source.

Group 2 wastewater stream means a wastewater stream that does not meet the definition of a Group 1 wastewater stream.

Halogenated vent stream means a vent stream determined to contain halogen atoms in organic compounds at a concentration greater than or equal to 20 ppmv as determined by the procedures specified in §63.8000(b).

Hydrogen halide and halogen HAP means hydrogen chloride, chlorine, and hydrogen fluoride.

In organic HAP service means that a piece of equipment either contains or contacts a fluid (liquid or gas) that is at least 5 percent by weight of total organic HAP as determined according to the provisions of §63.180(d). The provisions of §63.180(d) also specify how to determine that a piece of equipment is not in organic HAP service.

Large control device means a control device that controls total HAP emissions of greater than or equal to 10 tpy, before control.

Maximum true vapor pressure means the equilibrium partial pressure exerted by the total organic HAP in the stored or transferred liquid at the temperature equal to the highest calendar-month average of the liquid storage or transfer temperature for liquids stored or transferred above or below the ambient temperature or at the local maximum monthly average temperature as reported by the National Weather Service for liquids stored or transferred at the ambient temperature, as determined:

1. In accordance with methods described in American Petroleum Institute Publication 2517, Evaporative Loss From External Floating-Roof Tanks (incorporated by reference as specified in §63.14 of subpart A of this part 63); or
2. As obtained from standard reference texts; or
3. As determined by the American Society for Testing and Materials Method D2879–83 (incorporated by reference as specified in §63.14 of subpart A of this part); or
4. Any other method approved by the Administrator.

Partially soluble HAP means HAP listed in Table 7 of this subpart.

Point of determination (POD) means each point where process wastewater exits the miscellaneous coating operations.

Note to definition for point of determination: The regulation allows determination of the characteristics of a wastewater stream at the point of determination or downstream of the point of determination if corrections are made for changes in flow rate and annual average concentration of partially soluble and soluble HAP compounds as determined in §63.144. Such changes include losses by air emissions; reduction of annual average concentration or changes in flow rate by mixing with other water or wastewater streams; and reduction in flow rate or annual average concentration by treating or otherwise handling the wastewater stream to remove or destroy HAP.

Process vessel means any stationary or portable tank or other vessel with a capacity greater than or equal to 250 gal and in which mixing, blending, diluting, dissolving, temporary holding, and other processing steps occur in the manufacturing of a coating.
Process vessel vent means a vent from a process vessel or vents from multiple process vessels that are manifolded together into a common header, through which a HAP-containing gas stream is, or has the potential to be, released to the atmosphere. Emission streams that are undiluted and uncontrolled containing less than 50 ppmv HAP, as determined through process knowledge that no HAP are present in the emission stream or using an engineering assessment as discussed in §63.1257(d)(2)(ii), test data using Method 18 of 40 CFR part 60, appendix A, or any other test method that has been validated according to the procedures in Method 301 of appendix A of this part, are not considered process vessel vents. Flexible elephant trunk systems when used with closed vent systems and drawing ambient air (i.e., the system is not ducted, piped, or otherwise connected to the unit operations) away from operators when vessels are opened are not process vessel vents. Process vessel vents do not include vents on storage tanks, wastewater emission sources, or pieces of equipment subject to the requirements in Table 3 of this subpart. A gas stream going to a fuel gas system is not a process vessel vent. A gas stream routed to a process for a process purpose is not a process vessel vent.

Recovery device, as used in the wastewater provisions, means an individual unit of equipment used for the purpose of recovering chemicals for fuel value (i.e., net positive heating value), use, reuse, or for sale for fuel value, use, or reuse. Examples of equipment that may be recovery devices include organic removal devices such as decanters, strippers, or thin-film evaporation units. To be a recovery device, a decanter and any other equipment based on the operating principle of gravity separation must receive only multiphase liquid streams. A recovery device is considered part of the miscellaneous coating manufacturing operations.

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

Safety device means a closure device such as a pressure relief valve, frangible disc, fusible plug, or any other type of device which functions exclusively to prevent physical damage or permanent deformation to a unit or its air emission control equipment by venting gases or vapors directly to the atmosphere during unsafe conditions resulting from an unplanned, accidental, or emergency event. For the purposes of this subpart, a safety device is not used for routine venting of gases or vapors from the vapor headspace underneath a cover such as during filling of the unit or to adjust the pressure in response to normal daily diurnal ambient temperature fluctuations. A safety device is designed to remain in a closed position during normal operations and open only when the internal pressure, or another relevant parameter, exceeds the device threshold setting applicable to the air emission control equipment as determined by the owner or operator based on manufacturer recommendations, applicable regulations, fire protection and prevention codes and practices, or other requirements for the safe handling of flammable, combustible, explosive, reactive, or hazardous materials.

Shutdown means the cessation of operation of an affected source, any process vessels within an affected source, or equipment required or used to comply with this subpart if steps taken to cease operation differ from those under routine procedures for removing the vessel or equipment from service. Shutdown also applies to the emptying and degassing of storage tanks.

Small control device means a control device that controls total HAP emissions of less than 10 tpy, before control.

Soluble HAP means the HAP listed in Table 8 of this subpart.

Startup means the setting in operation of a new affected source. For new equipment added to an affected source, including equipment required or used to comply with this subpart, startup means the first time the equipment is put into operation. Startup includes the setting in operation of equipment any time the steps taken differ from routine procedures for putting the equipment into operation.

Storage tank means a tank or other vessel that is used to store organic liquids that contain one or more HAP as raw material feedstocks or products.
The following are not considered storage tanks for the purposes of this subpart:

1. Vessels permanently attached to motor vehicles such as trucks, railcars, barges, or ships;
2. Pressure vessels designed to operate in excess of 204.9 kilopascals and without emissions to the atmosphere;
3. Vessels storing organic liquids that contain HAP only as impurities;
4. Wastewater storage tanks; and
5. Process vessels.

Total organic compounds or (TOC) means the total gaseous organic compounds (minus methane and ethane) in a vent stream.

Wastewater storage tank means a stationary structure that is designed to contain an accumulation of wastewater and is constructed primarily of non-earthen materials (e.g., wood, concrete, steel, plastic) which provide structural support.

Wastewater stream means water that is discarded from miscellaneous coating manufacturing operations through a POD, and that contains an annual average concentration of total partially soluble and soluble HAP compounds of at least 1,600 ppmw at any flow rate. For the purposes of this subpart, non-contact cooling water is not considered a wastewater stream.

Work practice standard means any design, equipment, work practice, or operational standard, or combination thereof, that is promulgated pursuant to section 112(h) of the Clean Air Act.


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**Table 1 to Subpart HHHHH of Part 63—Emission Limits and Work Practice Standards for Process Vessels**

As required in §61.8005, you must meet each emission limit and work practice standard in the following table that applies to your process vessels.

<table>
<thead>
<tr>
<th>For each . . .</th>
<th>You must . . .</th>
<th>And you must . . .</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Portable process vessel at an existing source.</td>
<td>a. Equip the vessel with a cover or lid that must be in place at all times when the vessel contains a HAP, except for material additions and sampling.</td>
<td>Nonapplicable.</td>
</tr>
<tr>
<td>2. Stationary process vessel at an existing source.</td>
<td>a. Equip the vessel with a cover or lid that must be in place at all times when the vessel contains a HAP, except for material additions and sampling; or b. Equip the vessel with a tightly fitting vented cover or lid that must be closed at all times when the vessel contains HAP, except for material additions and sampling.</td>
<td>i. Considering both capture and any combination of control (except a flare), reduce emissions of organic HAP with a vapor existing pressure &gt;0.6 kPa by &gt;75 percent by weight, and reduce emissions of organic HAP with a vapor pressure &lt;0.6 kPa by &gt;60 percent by weight.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>i. Reduce emissions of organic HAP with a vapor pressure &gt;0.6 kPa by &gt;75 percent by weight, and reduce emissions of organic HAP with a vapor pressure &lt;0.6 kPa by &gt;60 percent by weight, by venting emissions through a closed-vent system to any combination of control devices (except a flare); or ii. Reduce emissions of total organic HAP by venting emissions from a non-halogenated vent stream through a closed-vent system to a condenser that reduces the outlet gas temperature to:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>&lt;10 °C if the process vessel contains HAP with a partial pressure &lt;0.6 kPa, or</td>
</tr>
<tr>
<td></td>
<td></td>
<td>&lt;2 °C if the process vessel contains HAP with a partial pressure &gt;0.6 kPa and &lt;17.2 kPa, or</td>
</tr>
</tbody>
</table>
For each . . . | You must . . . | And you must . . .
---|---|---
3. Portable and stationary process vessel at a new source. | a. Equip the vessel with a tightly fitting vented cover or lid that must be closed at all times when the vessel contains HAP, except for material additions and sampling. | If the process vessel contains HAP with a partial pressure $\geq 17.2 \text{ kPa}$, then you must:
  i. Reduce emissions of total organic HAP by $\geq 95$ percent by weight by venting emissions through a closed-vent system to any combination of control devices (except a flare); or
  ii. Reduce emissions of total organic HAP by venting emissions from a non-halogenated vent stream through a closed-vent system to a flare; or
  iii. Reduce emissions of total organic HAP by venting emissions through a closed-vent system to a condenser that reduces the outlet gas temperature to:
    - $< -5 ^\circ \text{C}$ if the process vessel contains HAP with a partial pressure $< 0.7 \text{ kPa}$,
    - $< -20 ^\circ \text{C}$ if the process vessel contains HAP with a partial pressure $< 17.2 \text{ kPa}$, or
    - $< -30 ^\circ \text{C}$ if the process vessel contains HAP with a partial pressure $\geq 17.2 \text{ kPa}$.

4. Halogenated vent steam from a process vessel subject to the requirements of item 2 or 3 of this table for which you use a combustion control device to control organic HAP emissions. | a. Use a halogen reduction device after the combustion control device; or | If the process vessel contains HAP with a partial pressure $< 0.7 \text{ kPa}$, then you must:
  i. Reduce overall emissions of hydrogen halide and halogen HAP by $\geq 95$ percent; or
  ii. Reduce overall emissions of hydrogen halide and halogen HAP to $\leq 0.45 \text{ kg/hr}$. |
| b. Use a halogen reduction device before the combustion control device. | |

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**TABLE 2 TO SUBPART HHHHH OF PART 63—EMISSION LIMITS FOR STORAGE TANKS**

As required in §63.8010, you must meet each emission limit in the following table that applies to your storage tanks.

For each . . . | Then you must . . .
---|---
1. Group 1a storage tank | a. Comply with the requirements of subpart WW of this part, except as specified in §63.8010(b); or
b. Reduce total organic HAP emissions from the storage tank by $\geq 90$ percent by weight by venting emissions through a closed-vent system to any combination of control devices (excluding a flare); or
c. Reduce total organic HAP emissions from the storage tank by venting emissions from a non-halogenated vent stream through a closed-vent system to a flare.

2. Group 1b storage tank | a. Comply with the requirements of subpart WW of this part, except as specified in §63.8010(b); or
b. Reduce total organic HAP emissions from the storage tank by $\geq 80$ percent by weight by venting emissions through a closed-vent system to any combination of control devices (excluding a flare); or
c. Reduce total organic HAP emissions from the storage tank by venting emissions from a non-halogenated vent stream through a closed-vent system to a flare.

---

**TABLE 3 TO SUBPART HHHHH OF PART 63—REQUIREMENTS FOR EQUIPMENT LEAKS**

As required in §63.8015, you must meet each requirement in the following table that applies to your equipment leaks.

For all . . . | You must . . .
---|---
1. Equipment that is in organic HAP service at an existing source. | a. Comply with the requirements in §§63.424(a) through (d) and 63.428(e), (f), and (h)(4), except as specified in §63.8015(b); or
b. Comply with the requirements of subpart TT of this part; or
c. Comply with the requirements of subpart UU of this part, except as specified in §63.8015(c) and (d).
For all . . . You must . . .

2. Equipment that is in organic HAP service at a new source.
   a. Comply with the requirements of subpart TT of this part; or
   b. Comply with the requirements of subpart UU of this part, except as specified in §63.8015(c) and (d).

[68 FR 58190, Oct. 8, 2003, as amended at 71 FR 69021, Nov. 29, 2006]

**TABLE 4 TO SUBPART HHHHH OF PART 63—EMISSION LIMITS AND WORK PRACTICE STANDARDS FOR WASTEWATER STREAMS**

As required in §63.8020, you must meet each emission limit and work practice standard in the following table that applies to your wastewater streams.

<table>
<thead>
<tr>
<th>For each . . .</th>
<th>You must . . .</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Wastewater tank used to store a Group 1 wastewater stream.</td>
<td>Maintain a fixed roof, which may have openings necessary for proper venting of the tank, such as pressure/vacuum vent or j-pipe vent.</td>
</tr>
</tbody>
</table>
| 2. Group 1 wastewater stream. | a. Convey using hard-piping and treat the wastewater as a hazardous waste in accordance with 40 CFR part 264, 265, or 266 either onsite or offsite; or  
   b. If the wastewater contains <50 ppmw of partially soluble HAP, you may elect to treat the wastewater in an enhanced biological treatment system that is located either onsite or offsite. |

**TABLE 5 TO SUBPART HHHHH OF PART 63—EMISSION LIMITS AND WORK PRACTICE STANDARDS FOR TRANSFER OPERATIONS**

As required in §63.8025, you must meet each emission limit and work practice standard in the following table that applies to your transfer operations.

<table>
<thead>
<tr>
<th>For each . . .</th>
<th>You must . . .</th>
</tr>
</thead>
</table>
| 1. Group 1 transfer operation vent stream. | a. Reduce emissions of total organic HAP by ≥75 percent by weight by venting emissions through a closed-vent system to any combination of control devices (except a flare); or  
   b. Reduce emissions of total organic HAP by venting emissions from a non-halogenated vent stream through a closed-vent system to a flare; or  
   c. Use a vapor balancing system designed and operated to collect organic HAP vapors displaced from tank trucks and railcars during loading and route the collected HAP vapors to the storage tank from which the liquid being loaded originated or to another storage tank connected by a common header. |
| 2. Halogenated Group 1 transfer operation vent stream for which you use a combustion device to control organic HAP emissions. | a. Use a halogen reduction device after the combustion device to reduce emissions of hydrogen halide and halogen HAP by ≥95 percent by weight or to ≤0.45 kg/hr; or  
   b. Use a halogen reduction device before the combustion device to reduce the halogen atom mass emission rate to ≤0.45 kg/hr. |

**TABLE 6 TO SUBPART HHHHH OF PART 63—REQUIREMENTS FOR HEAT EXCHANGE SYSTEMS**

As required in §63.8030, you must meet each requirement in the following table that applies to your heat exchange systems.

<table>
<thead>
<tr>
<th>For each . . .</th>
<th>You must . . .</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heat exchange system, as defined in §63.101.</td>
<td>Comply with the requirements in §63.104, except as specified in §63.8030.</td>
</tr>
</tbody>
</table>

**TABLE 7 TO SUBPART HHHHH OF PART 63—PARTIALLY SOLUBLE HAZARDOUS AIR POLLUTANTS**

As specified in §63.8020, the partially soluble HAP in wastewater that are subject to management and treatment requirements in this subpart are listed in the following table.

<table>
<thead>
<tr>
<th>Chemical name . . .</th>
<th>CAS No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. 1,1,1-Trichloroethane (methyl chloroform)</td>
<td>71556</td>
</tr>
<tr>
<td>2. 1,1,2,2-Tetrachloroethane</td>
<td>79345</td>
</tr>
<tr>
<td>3. 1,1,2-Trichloroethane</td>
<td>79005</td>
</tr>
</tbody>
</table>

352
Environmental Protection Agency
Pt. 63, Subpt. HHHHH, Table 8

<table>
<thead>
<tr>
<th>Chemical name . . .</th>
<th>CAS No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>4. 1,1-Dichloroethylene (vinylidene chloride)</td>
<td>75354</td>
</tr>
<tr>
<td>5. 1,2-Dibromomethane</td>
<td>106907</td>
</tr>
<tr>
<td>6. 1,2-Dichloroethane (ethyl chloride)</td>
<td>107062</td>
</tr>
<tr>
<td>7. 1,2-Dichloropropane</td>
<td>78875</td>
</tr>
<tr>
<td>8. 1,3-Dichloropropene</td>
<td>542756</td>
</tr>
<tr>
<td>9. 2,4,5-Trichlorophenol</td>
<td>95954</td>
</tr>
<tr>
<td>10. 2-Butanone (MEK)</td>
<td>78933</td>
</tr>
<tr>
<td>11. 1,4-Dichlorobenzene</td>
<td>106467</td>
</tr>
<tr>
<td>12. 2-Nitropropane</td>
<td>79469</td>
</tr>
<tr>
<td>13. 4-Methyl-2-pentanone (MIBK)</td>
<td>108101</td>
</tr>
<tr>
<td>14. Acetaldehyde</td>
<td>75070</td>
</tr>
<tr>
<td>15. Acrolein</td>
<td>107028</td>
</tr>
<tr>
<td>16. Acrylonitrile</td>
<td>107131</td>
</tr>
<tr>
<td>17. Allyl chloride</td>
<td>107051</td>
</tr>
<tr>
<td>18. Benzene</td>
<td>71432</td>
</tr>
<tr>
<td>19. Benzyll chloride</td>
<td>100447</td>
</tr>
<tr>
<td>20. Biphenyl</td>
<td>92524</td>
</tr>
<tr>
<td>21. Bromoform (tribromomethane)</td>
<td>75252</td>
</tr>
<tr>
<td>22. Bromomethane</td>
<td>74839</td>
</tr>
<tr>
<td>23. Butadiene</td>
<td>106990</td>
</tr>
<tr>
<td>24. Carbon disulfide</td>
<td>75150</td>
</tr>
<tr>
<td>25. Chlorobenzene</td>
<td>108907</td>
</tr>
<tr>
<td>26. Chloroethane (ethyl chloride)</td>
<td>75003</td>
</tr>
<tr>
<td>27. Chloroform</td>
<td>67663</td>
</tr>
<tr>
<td>28. Chloromethane</td>
<td>74873</td>
</tr>
<tr>
<td>29. Chloroprene</td>
<td>126998</td>
</tr>
<tr>
<td>30. Cumene</td>
<td>98828</td>
</tr>
<tr>
<td>31. Dichloroethyl ether</td>
<td>111444</td>
</tr>
<tr>
<td>32. Dinitrophenol</td>
<td>51285</td>
</tr>
<tr>
<td>33. Epichlorohydrin</td>
<td>106898</td>
</tr>
<tr>
<td>34. Ethyl acrylate</td>
<td>140885</td>
</tr>
<tr>
<td>35. Ethylbenzene</td>
<td>100414</td>
</tr>
<tr>
<td>36. Ethylene oxide</td>
<td>75218</td>
</tr>
<tr>
<td>37. Ethylene dichloride</td>
<td>75343</td>
</tr>
<tr>
<td>38. Hexachlorobenzene</td>
<td>118741</td>
</tr>
<tr>
<td>39. Hexachlorobutadiene</td>
<td>87683</td>
</tr>
<tr>
<td>40. Hexachloroethane</td>
<td>67721</td>
</tr>
<tr>
<td>41. Methyl methacrylate</td>
<td>80628</td>
</tr>
<tr>
<td>42. Methyl-t-buty1 ether</td>
<td>1634044</td>
</tr>
<tr>
<td>43. Methylene chloride</td>
<td>75092</td>
</tr>
<tr>
<td>44. N-hexane</td>
<td>110543</td>
</tr>
<tr>
<td>45. N,N-dimethylaniline</td>
<td>121697</td>
</tr>
<tr>
<td>46. Naphthalene</td>
<td>91203</td>
</tr>
<tr>
<td>47. Phosgene</td>
<td>75445</td>
</tr>
<tr>
<td>48. Propionaldehyde</td>
<td>123386</td>
</tr>
<tr>
<td>49. Propylene oxide</td>
<td>75569</td>
</tr>
<tr>
<td>50. Styrene</td>
<td>100425</td>
</tr>
<tr>
<td>51. Tetrachloroethylene (perchloroethylene)</td>
<td>127184</td>
</tr>
<tr>
<td>52. Tetrachloromethane (carbon tetrachloride)</td>
<td>56235</td>
</tr>
<tr>
<td>53. Toluene</td>
<td>108883</td>
</tr>
<tr>
<td>54. Trichlorobenzene (1,2,4-)</td>
<td>120821</td>
</tr>
<tr>
<td>55. Trichloroethylene</td>
<td>79016</td>
</tr>
<tr>
<td>56. Trimethylpentane</td>
<td>540841</td>
</tr>
<tr>
<td>57. Vinyl acetate</td>
<td>108054</td>
</tr>
<tr>
<td>58. Vinyl chloride</td>
<td>75014</td>
</tr>
<tr>
<td>59. Xylene (m)</td>
<td>108383</td>
</tr>
<tr>
<td>60. Xylene (o)</td>
<td>95476</td>
</tr>
<tr>
<td>61. Xylene (p)</td>
<td>106423</td>
</tr>
</tbody>
</table>

[88 FR 69185, Dec. 11, 2003, as amended at 70 FR 25683, May 13, 2005]

**Table 8 to Subpart FFFF of Part 63—Soluble Hazardous Air Pollutants**

As specified in §63.820, the soluble HAP in wastewater that are subject to management and treatment requirements of this subpart are listed in the following table:

<table>
<thead>
<tr>
<th>Chemical name . . .</th>
<th>CAS No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Acetonitrile</td>
<td>75058</td>
</tr>
<tr>
<td>2. Acetophenone</td>
<td>98862</td>
</tr>
<tr>
<td>3. Diethyl sulfate</td>
<td>64675</td>
</tr>
<tr>
<td>4. Dimethyl hydrazine (1,1)</td>
<td>57147</td>
</tr>
<tr>
<td>5. Dimethyl sulfate</td>
<td>77781</td>
</tr>
</tbody>
</table>

353
TABLE 9 TO SUBPART HHHHH OF PART 63—REQUIREMENTS FOR REPORTS

As required in §63.8075(a) and (b), you must submit each report that applies to you on the schedule shown in the following table:

<table>
<thead>
<tr>
<th>You must submit a . . .</th>
<th>The report must contain . . .</th>
<th>You must submit the report . . .</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Precompliance report</td>
<td>The information specified in §63.8075(e)</td>
<td>At least 6 months prior to the compliance date; or for new sources, with the application for approval of construction or reconstruction.</td>
</tr>
<tr>
<td>2. Notification of compliance status report</td>
<td>The information specified in §63.8075(d)</td>
<td>No later than 150 days after the compliance date specified in §63.7995.</td>
</tr>
<tr>
<td>3. Compliance report</td>
<td>The information specified in §63.8075(e)</td>
<td>Semiannually according to the requirements in §63.8075(b).</td>
</tr>
</tbody>
</table>

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

As specified in §63.8095, the parts of the General Provisions that apply to you are shown in the following table:

<table>
<thead>
<tr>
<th>Citation</th>
<th>Subject</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>§63.1</td>
<td>Applicability</td>
<td>Yes.</td>
</tr>
<tr>
<td>§63.2</td>
<td>Definitions</td>
<td>Yes.</td>
</tr>
<tr>
<td>§63.3</td>
<td>Units and Abbreviations</td>
<td>Yes.</td>
</tr>
<tr>
<td>§63.4</td>
<td>Prohibited Activities</td>
<td>Yes.</td>
</tr>
<tr>
<td>§63.5</td>
<td>Construction/Reconstruction</td>
<td>Yes.</td>
</tr>
<tr>
<td>§63.6(a)</td>
<td>Applicability</td>
<td>Yes.</td>
</tr>
<tr>
<td>§63.6(b)(1)–(4)</td>
<td>Compliance Dates for New and Reconstructed sources.</td>
<td>Yes.</td>
</tr>
<tr>
<td>§63.6(b)(5)</td>
<td>Notification</td>
<td>Yes.</td>
</tr>
<tr>
<td>§63.6(b)(6)</td>
<td>[Reserved].</td>
<td></td>
</tr>
<tr>
<td>§63.6(b)(7)</td>
<td>Compliance Dates for New and Reconstructed Area Sources That Become Major.</td>
<td>Yes.</td>
</tr>
<tr>
<td>§63.6(c)(1)–(2)</td>
<td>Compliance Dates for Existing Sources.</td>
<td>Yes.</td>
</tr>
<tr>
<td>§63.6(c)(3)–(4)</td>
<td>[Reserved].</td>
<td></td>
</tr>
<tr>
<td>§63.6(c)(5)</td>
<td>Compliance Dates for Existing Area Sources That Become Major.</td>
<td>Yes.</td>
</tr>
<tr>
<td>§63.6(d)</td>
<td>[Reserved].</td>
<td></td>
</tr>
<tr>
<td>§63.6(e)(1)–(2)</td>
<td>Operation &amp; Maintenance</td>
<td>Yes.</td>
</tr>
<tr>
<td>§63.6(e)(3)</td>
<td>SSMP</td>
<td>Yes, except information regarding Group 2 emission points and equipment leaks is not required in the SSMP, as specified in §63.8090(f).</td>
</tr>
<tr>
<td>§63.6(e)(3)(ii) and (iv)</td>
<td>Recompliance and Reporting During Startup, Shutdown, and Malfunction (SSM).</td>
<td>No, §§63.998(c)(3) and 63.998(c)(1)(i)(D) through (G) specify the recompliance requirement for SSM events, and §63.8075(e)(5) specifies reporting requirements.</td>
</tr>
<tr>
<td>§63.6(e)(3)(x)</td>
<td>Title V permit</td>
<td>Yes.</td>
</tr>
<tr>
<td>§63.6(f)(1)</td>
<td>Compliance Except During SSM.</td>
<td>Yes.</td>
</tr>
<tr>
<td>§63.6(f)(2)–(3)</td>
<td>Methods for Determining Compliance.</td>
<td>Yes.</td>
</tr>
<tr>
<td>§63.6(g)(1)–(3)</td>
<td>Alternative Standard</td>
<td>Yes.</td>
</tr>
<tr>
<td>Citation</td>
<td>Subject</td>
<td>Explanation</td>
</tr>
<tr>
<td>----------</td>
<td>-----------------------------------------------</td>
<td>----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>§ 63.6(h)</td>
<td>Opacity/Visible Emission (VE) Standards.</td>
<td>Only for flares for which Method 22 observations are required as part of a flare compliance assessment.</td>
</tr>
<tr>
<td>§ 63.6(i)(1)–(14)</td>
<td>Compliance Extension</td>
<td>Yes.</td>
</tr>
<tr>
<td>§ 63.6(j)</td>
<td>Presidential Compliance Extension.</td>
<td>Yes.</td>
</tr>
<tr>
<td>§ 63.7(a)(1)–(2)</td>
<td>Performance Test Dates</td>
<td>Yes, except substitute 150 days for 180 days.</td>
</tr>
<tr>
<td>§ 63.7(a)(3)</td>
<td>CAA Section 114 Authority</td>
<td>Yes, and this paragraph also applies to flare compliance assessments as specified under § 63.997(b)(2).</td>
</tr>
<tr>
<td>§ 63.7(b)(1)</td>
<td>Notification of Performance Test.</td>
<td>Yes.</td>
</tr>
<tr>
<td>§ 63.7(b)(2)</td>
<td>Notification of Rescheduling</td>
<td>Yes, except the test plan must be submitted with the notification of the performance test if the control device controls process vessels.</td>
</tr>
<tr>
<td>§ 63.7(c)</td>
<td>Testing Facilities.</td>
<td>Yes.</td>
</tr>
<tr>
<td>§ 63.7(e)(1)</td>
<td>Conditions for Conducting Performance Tests.</td>
<td>Yes.</td>
</tr>
<tr>
<td>§ 63.7(e)(2)</td>
<td>Test Run Duration.</td>
<td>Yes.</td>
</tr>
<tr>
<td>§ 63.8(a)(1)</td>
<td>Performance Test Data Analysis.</td>
<td>Yes.</td>
</tr>
<tr>
<td>§ 63.8(a)(2)</td>
<td>Waiver of Tests.</td>
<td>Yes.</td>
</tr>
<tr>
<td>§ 63.8(a)(3)</td>
<td>Alternative Test Method</td>
<td>Yes.</td>
</tr>
<tr>
<td>§ 63.8(a)(4)</td>
<td>Multiple Effluents and Multiple Monitoring Systems.</td>
<td>Yes.</td>
</tr>
<tr>
<td>§ 63.8(b)(1)</td>
<td>Maintenance and operation of CMS.</td>
<td>Yes.</td>
</tr>
<tr>
<td>§ 63.8(b)(2)</td>
<td>Monitors with Flares.</td>
<td>Yes.</td>
</tr>
<tr>
<td>§ 63.8(b)(3)</td>
<td>Monitoring with Flares.</td>
<td>Yes.</td>
</tr>
<tr>
<td>§ 63.8(b)(4)</td>
<td>Monitoring System Installation.</td>
<td>Yes.</td>
</tr>
<tr>
<td>§ 63.8(c)(1)</td>
<td>Requirements.</td>
<td>Only for CEMS; requirements for CPMS are specified in referenced subpart SS of 40 CFR part 63. This subpart does not contain requirements for continuous opacity monitoring systems (COMS).</td>
</tr>
<tr>
<td>§ 63.8(c)(2)</td>
<td>Maintain and operate CMS</td>
<td>Yes.</td>
</tr>
<tr>
<td>§ 63.8(c)(3)</td>
<td>Routine repairs.</td>
<td>Yes.</td>
</tr>
<tr>
<td>§ 63.8(c)(4)</td>
<td>CMS Quality Control</td>
<td>Only for CEMS; requirements for CPMS are specified in referenced subpart SS of 40 CFR part 63.</td>
</tr>
<tr>
<td>§ 63.8(c)(5)</td>
<td>CMS Standards.</td>
<td>No. This subpart does not contain opacity or VE limits.</td>
</tr>
<tr>
<td>§ 63.8(c)(6)</td>
<td>CMS Minimum Procedures</td>
<td>No. This subpart does not contain opacity or VE limits.</td>
</tr>
<tr>
<td>§ 63.8(c)(7)–(8)</td>
<td>CMS Requirements</td>
<td>Only for CEMS. Requirements for CPMS are specified in referenced subpart SS of 40 CFR part 63.</td>
</tr>
<tr>
<td>§ 63.8(c)(9)</td>
<td>CMS Performance Evaluation</td>
<td>Section 63.8(e)(6)(i) does not apply because this subpart does not require COMS. Other sections apply only for CEMS; requirements for CPMS are specified in referenced subpart SS of 40 CFR part 63.</td>
</tr>
<tr>
<td>§ 63.8(e)</td>
<td>Alternative Monitoring Method</td>
<td>Yes, except you may also request approval using the preclosure report.</td>
</tr>
<tr>
<td>§ 63.8(f)(1)–(5)</td>
<td>Alternative to Relative Accuracy Test.</td>
<td>Only for CEMS.</td>
</tr>
<tr>
<td>§ 63.8(g)(1)–(4)</td>
<td>Data Reduction</td>
<td>Only when using CEMS, except § 63.8(g)(2) does not apply because data reduction requirements for CEMS are specified in §§ 63.8000(d)(4)(v). The requirements for COMS do not apply because this subpart has no opacity or VE limits.</td>
</tr>
<tr>
<td>§ 63.8(g)(5)</td>
<td>Data Reduction</td>
<td>No. Requirements for CEMS are specified in § 63.8000(d)(4). Requirements for CPMS are specified in referenced subpart SS of 40 CFR part 63.</td>
</tr>
<tr>
<td>§ 63.9(a)</td>
<td>Notification Requirements</td>
<td>Yes.</td>
</tr>
<tr>
<td>§ 63.9(b)(1)–(5)</td>
<td>Initial Notifications</td>
<td>Yes.</td>
</tr>
<tr>
<td>§ 63.9(c)</td>
<td>Request for Compliance Extension.</td>
<td>Yes.</td>
</tr>
<tr>
<td>Citation</td>
<td>Subject</td>
<td>Explanation</td>
</tr>
<tr>
<td>---------------</td>
<td>----------------------------------------------</td>
<td>-------------------------------------------------</td>
</tr>
<tr>
<td>§63.9(d)</td>
<td>Notification of Special Compliance Requirements for New Source.</td>
<td>Yes.</td>
</tr>
<tr>
<td>§63.9(e)</td>
<td>Notification of Performance Test.</td>
<td>Yes.</td>
</tr>
<tr>
<td>§63.9(f)</td>
<td>Notification of VE/Opacity Test.</td>
<td>No. This subpart does not contain opacity or VE limits.</td>
</tr>
<tr>
<td>§63.9(g)</td>
<td>Additional Notifications When Using CMS.</td>
<td>Only for CEMS; requirements for CPMS are specified in referenced subpart SS of 40 CFR part 63.</td>
</tr>
<tr>
<td>§63.9(h)(1)–(6)</td>
<td>Notification of Compliance Status.</td>
<td>Yes, except this subpart has no opacity or VE limits, and §63.9(h)(2) does not apply because §63.8075(d) specifies the required contents and due date of the notification of compliance status report.</td>
</tr>
<tr>
<td>§63.9(i)</td>
<td>Adjustment of Submittal Deadlines.</td>
<td>Yes.</td>
</tr>
<tr>
<td>§63.9(j)</td>
<td>Change in Previous Information.</td>
<td>No. §63.8075(e)(8) specifies reporting requirements for process changes.</td>
</tr>
<tr>
<td>§63.10(a)</td>
<td>Recordkeeping/Reporting.</td>
<td>Yes.</td>
</tr>
<tr>
<td>§63.10(b)(1)</td>
<td>Recordkeeping/Reporting.</td>
<td>Yes.</td>
</tr>
<tr>
<td>§63.10(b)(2)(i)–(iv)</td>
<td>Records related to SSM.</td>
<td>No. §§63.998(d)(3) and 63.998(c)(1)(ii)(D) through (G) specify recordkeeping requirements for periods of SSM.</td>
</tr>
<tr>
<td>§63.10(b)(2)(vi), (x), and (xi)</td>
<td>CMS Records</td>
<td>Only for CEMS; requirements for CPMS are specified in referenced subpart SS of 40 CFR part 63.</td>
</tr>
<tr>
<td>§63.10(b)(2)(vii)–(ix)</td>
<td>Records</td>
<td>Yes.</td>
</tr>
<tr>
<td>§63.10(b)(2)(xvi)</td>
<td>Records</td>
<td>Yes.</td>
</tr>
<tr>
<td>§63.10(b)(3)</td>
<td>Records</td>
<td>Yes.</td>
</tr>
<tr>
<td>§63.10(c)(1)–(6), (9)–(15)</td>
<td>Records</td>
<td>Only for CEMS; requirements for CPMS are specified in referenced subpart SS of 40 CFR part 63.</td>
</tr>
<tr>
<td>§63.10(c)(7)–(8)</td>
<td>Reports</td>
<td>No. Recordkeeping requirements are specified in §63.8080.</td>
</tr>
<tr>
<td>§63.10(d)(1)</td>
<td>General Reporting Requirements.</td>
<td>Yes.</td>
</tr>
<tr>
<td>§63.10(d)(2)</td>
<td>Report of Performance Test Results.</td>
<td>Yes.</td>
</tr>
<tr>
<td>§63.10(d)(3)</td>
<td>Reporting Opacity or VE Observations.</td>
<td>No. This subpart does not contain opacity or VE limits.</td>
</tr>
<tr>
<td>§63.10(d)(4)</td>
<td>Progress Reports</td>
<td>Yes.</td>
</tr>
<tr>
<td>§63.10(d)(5)(i)</td>
<td>SSM Reports</td>
<td>No, §63.8075(e)(5) and (6) specify the SSM reporting requirements.</td>
</tr>
<tr>
<td>§63.10(e)(1)–(2)</td>
<td>Additional CMS Reports</td>
<td>Only for CEMS, but §63.10(e)(2)(ii) does not apply because this subpart does not require CMS.</td>
</tr>
<tr>
<td>§63.10(e)(3)</td>
<td>Reports</td>
<td>No. Reporting requirements are specified in §63.8075.</td>
</tr>
<tr>
<td>§63.10(e)(3)(i)–(iii)</td>
<td>Excess Emissions Reports</td>
<td>No. Reporting requirements are specified in §63.8075.</td>
</tr>
<tr>
<td>§63.10(e)(4)</td>
<td>Reporting CMS data</td>
<td>No. This subpart does not contain opacity or VE limits.</td>
</tr>
<tr>
<td>§63.10(f)</td>
<td>Waiver for Recordkeeping/Reporting.</td>
<td>Yes.</td>
</tr>
<tr>
<td>§63.11</td>
<td>Control and work practice requirements.</td>
<td>Yes.</td>
</tr>
<tr>
<td>§63.12</td>
<td>Delegation</td>
<td>Yes.</td>
</tr>
<tr>
<td>§63.13</td>
<td>Addresses</td>
<td>Yes.</td>
</tr>
<tr>
<td>§63.14</td>
<td>Incorporation by Reference</td>
<td>Yes.</td>
</tr>
<tr>
<td>§63.15</td>
<td>Availability of Information</td>
<td>Yes.</td>
</tr>
</tbody>
</table>
What this Subpart Covers

§ 63.8180 What is the purpose of this subpart?
This subpart establishes national emission standards for hazardous air pollutants (NESHAP) for affected sources of mercury emissions at mercury cell chlor-alkali plants. This subpart also establishes requirements to demonstrate initial and continuous compliance with all applicable emission limitations and work practice standards in this subpart.

§ 63.8182 Am I subject to this subpart?
(a) You are subject to this subpart if you own or operate a mercury cell chlor-alkali plant.
(b) You are required to obtain a title V permit, whether your affected source is a part of a major source of hazardous air pollutant (HAP) emissions or a part of an area source of HAP emissions. A major source of HAP is a source that emits or has the potential to emit any single HAP at a rate of 10 tons or more per year or any combination of HAP at a rate of 25 tons or more per year. An area source of HAP is a source that has the potential to emit HAP but is not a major source. Nothing in this subpart revises how affected sources are aggregated for purposes of determining whether an affected source is a part of an area, nonmajor, or major source under any provisions of the Clean Air Act (CAA) or EPA's regulations. For information on aggregating affected sources to determine what is a source under title V, see the definition of major source in 40 CFR 70.2, 71.2 and 63.2.
(c) Beginning on December 19, 2006, the provisions of subpart E of 40 CFR part 61 that apply to mercury chlor-alkali plants, which are listed in paragraphs (c)(1) through (3) of this section, are no longer applicable.
(1) §61.52(a);
(2) §61.53(b) and (c); and
(3) §61.55(b), (c) and (d).

§ 63.8184 What parts of my plant does this subpart cover?
(a) This subpart applies to each affected source at a plant site where chlorine and caustic are produced in mercury cells. This subpart applies to two types of affected sources: the mercury cell chlor-alkali production facility, as defined in paragraph (a)(1) of this section; and the mercury recovery facility, as defined in paragraph (a)(2) of this section.
(1) The mercury cell chlor-alkali production facility designates an affected source consisting of all cell rooms and ancillary operations used in the manufacture of product chlorine, product caustic, and by-product hydrogen at a plant site. This subpart covers mercury emissions from by-product hydrogen streams, end box ventilation system vents, and fugitive emission sources associated with cell rooms, hydrogen systems, caustic systems, and storage areas for mercury-containing wastes.
(b) An affected source at your mercury cell chlor-alkali plant is existing if you commenced construction of the affected source before July 3, 2002.
(c) A mercury recovery facility is a new affected source if you commence construction or reconstruction of the affected source after July 3, 2002. An affected source is reconstructed if it meets the definition of "reconstruction" in §63.2.

§ 63.8186 When do I have to comply with this subpart?
(a) If you have an existing affected source, you must comply with each emission limitation, work practice standard, and recordkeeping and reporting requirement in this subpart that applies to you no later than December 19, 2006.
(b) If you have a new or reconstructed mercury recovery facility and its initial startup date is on or before December 19, 2003, you must comply with each emission limitation, work practice standard, and recordkeeping and reporting requirement in this subpart that applies to you by December 19, 2003.
§ 63.8190 If you have a new or reconstructed mercury recovery facility and its initial startup date is after December 19, 2003, you must comply with each emission limitation, work practice standard, and recordkeeping and reporting requirement in this subpart that applies to you upon initial startup.

You must meet the notification and schedule requirements in § 63.8252. Several of these notifications must be submitted before the compliance date for your affected source(s).

EMISSION LIMITATIONS AND WORK PRACTICE STANDARDS
§ 63.8190 What emission limitations must I meet?
(a) Emission limits. You must meet each emission limit in paragraphs (a)(1) through (3) of this section that applies to you.
(1) New or reconstructed mercury cell chlor-alkali production facility. Emissions of mercury are prohibited from a new or reconstructed mercury cell chlor-alkali production facility.
(2) Existing mercury cell chlor-alkali production facility. During any consecutive 52-week period, you must not discharge to the atmosphere total mercury emissions in excess of the applicable limit in paragraph (a)(2)(i) or (ii) of this section calculated using the procedures in § 63.8243(a).
(i) 0.076 grams of mercury per megagram of chlorine produced (1.5 × 10⁻⁴ pounds of mercury per ton of chlorine produced) from all by-product hydrogen streams and all end box ventilation system vents when both types of emission points are present.
(ii) 0.033 grams of mercury per megagram of chlorine produced (6.59 × 10⁻⁵ pounds of mercury per ton of chlorine produced) from all by-product hydrogen streams when end box ventilation systems are not present.
(3) New, reconstructed, or existing mercury recovery facility. You must not discharge to the atmosphere mercury emissions in excess of the applicable limit in paragraph (a)(3)(i) or (ii) of this section.
(i) 23 milligrams per dry standard cubic meter from each oven type mercury thermal recovery unit vent.
(ii) 4 milligrams per dry standard cubic meter from each non-oven type mercury thermal recovery unit vent.

§ 63.8192 What work practice standards must I meet?
You must meet the work practice requirements specified in paragraphs (a) through (f) of this section. As an alternative to the requirements specified in paragraphs (a) through (d) of this section, you may choose to comply with paragraph (g) of this section.
(a) You must meet the work practice standards in Tables 1 through 4 to this subpart, except as specified in paragraph (g) of this section.
(b) You must adhere to the response intervals specified in Tables 1 through 4 to this subpart at all times. Non-adherence to the intervals in Tables 1 through 4 to this subpart constitutes a deviation and must be documented and reported in the compliance report, as required by § 63.8254(b), with the date and time of the deviation, cause of the deviation, a description of the conditions, and time actual compliance was achieved.
(c) As provided in § 63.6(g), you may request to use an alternative to the work practice standards in Tables 1 through 4 to this subpart.
(d) You must institute a floor-level mercury vapor measurement program to limit the amount of mercury vapor in the cell room environment through periodic measurement of mercury vapor levels and actions to be taken when a floor-level mercury concentration action level is exceeded. The program must meet the requirements listed in paragraphs (d)(1) through (4) of this section. As specified in § 63.8252(e)(1)(i) to implement this program, you must prepare and submit to the Administrator a floor-level mercury vapor measurement plan which must contain the elements listed in Table 5 to this subpart.
(1) You must utilize a mercury measurement device described in of Table 6 to this subpart to measure the level of mercury vapor in the cell room at floor-level.
(2) You must conduct at least one floor-level mercury vapor measurement evaluation each half day. This

evaluation must include three measurements of the mercury concentration at locations representative of the entire cell room floor area. The average of these measurements must be recorded as specified in §63.8156(c)(1). At a minimum, you must measure the level of mercury vapor above mercury-containing cell room equipment, as well as areas around the cells, decomposers, or other mercury-containing equipment.

(3) You must establish a floor-level mercury concentration action level that is no higher than 0.05 milligrams per cubic meter (mg/m³).

(4) If a mercury concentration greater than the action level is measured during any floor-level mercury vapor measurement evaluation, you must meet the requirements in either paragraph (d)(4)(i) or (ii) of this section.

(i) If you determine that the cause of the elevated mercury concentration is an open electrolyzer, decomposer, or other maintenance activity, you must record the information specified in paragraphs (d)(4)(i)(A) through (C) of this section.

(A) A description of the maintenance activity resulting in elevated mercury concentration;
(B) The time the maintenance activity was initiated and completed; and
(C) A detailed explanation how all the applicable requirements of Table 1 to this subpart were met during the maintenance activity.

(ii) If you determine that the cause of the elevated mercury concentration is not an open electrolyzer, decomposer, or other maintenance activity, you must follow the procedures specified in paragraphs (d)(4)(ii)(A) and (B) of this section until the floor-level mercury concentration falls below the floor-level mercury concentration action level. You must also keep all the associated records for these procedures as specified in Table 9 to this subpart.

(A) Within 1 hour of the time the floor-level mercury concentration action level was exceeded, you must conduct each inspection specified in Table 2 to this subpart in the area where the concentration higher than the floor-level mercury concentration action level was measured, with the exception of the cell room floor and the pillars and beam inspections. (B) You must also inspect all decomposers, hydrogen system piping up to the hydrogen header, and other potential locations of mercury vapor leaks in the area using a technique specified in Table 6 to this subpart. You must correct any problem identified during these inspections according to the requirements in Tables 2 and 3 to this subpart.

(e) You must prepare, submit, and operate according to a written washdown plan designed to minimize fugitive mercury emissions through routine washing of surfaces where liquid mercury could accumulate. The written plan must address the elements contained in Table 7 to this subpart.

(f) You must keep records of the mass of all virgin mercury added to cells on an annual basis.

(g) As an alternative to the work practice standards in paragraphs (a) through (d) of this section, you may institute a cell room monitoring program to continuously monitor the mercury vapor concentration in the upper portion of each cell room and to take corrective actions as quickly as possible when elevated mercury vapor levels are detected. As specified in §63.8252(e)(1)(iv), if you choose this option, you must prepare and submit to the Administrator, a cell room monitoring plan containing the elements listed in Table 5 to this subpart and meet the requirements in paragraphs (g)(1) through (4) of this section.

(1) You must utilize mercury monitoring systems that meet the requirements of Table 8 to this subpart.

(2) You must establish an action level according to the requirements in paragraphs (g)(2)(i) through (iii) of this section.

(i) Beginning on the compliance date specified for your affected source in §63.8186, measure and record the mercury concentration for at least 30 days using a system that meets the requirements of paragraph (g)(1) of this section.

(ii) Using the monitoring data collected according to paragraph (g)(1)(i) of this section, establish your action level at the 75th percentile of the data set.

(iii) Submit your action level as part of your Notification of Compliance
§ 63.8222 What are my operation and maintenance requirements?

As required by §63.6(e)(1)(i), you must always operate and maintain your affected source(s), including air pollution control and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions.

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

(a) You must be in compliance with the applicable emission limitations for by-product hydrogen streams, end box ventilation system vents, and mercury thermal recovery unit vents in §63.8190 at all times, except during periods of startup, shutdown, and malfunction. You must be in compliance with the applicable work practice standards in §63.8192 at all times, except during periods of startup, shutdown, and malfunction.

(b) You must develop a written startup, shutdown, and malfunction plan (SSMP) according to the provisions in §63.6(e)(3).


INITIAL COMPLIANCE REQUIREMENTS

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

(a) You must conduct a performance test no later than the compliance date that is specified in §63.8186 for your affected source to demonstrate initial compliance with the applicable emission limit in §63.8190(a)(2) for by-product hydrogen streams and end box ventilation system vents and the applicable emission limit in §63.8190(a)(3) for mercury thermal recovery unit vents.

(b) If the Table 2 inspections and subsequent corrective actions do not reduce the mercury concentration below the action level, you must inspect all decomposers, hydrogen system piping up to the hydrogen header, and other potential locations of mercury vapor leaks using a technique specified in Table 6 to this subpart. If a mercury vapor leak is identified, you must take the appropriate action specified in Table 3 to this subpart.

OPERATION AND MAINTENANCE REQUIREMENTS

Status report according to §63.8252(e)(1).

(3) Beginning on the compliance date specified for your affected source in §63.8186, you must continuously monitor the mercury concentration in the cell room. Failure to monitor and record the data according to §63.8256(c)(4)(ii) for 75 percent of the time in any 6-month period constitutes a deviation.

(4) If the average mercury concentration for any 1-hour period exceeds the action level established according to paragraph (g)(2) of this section, you must meet the requirements in either paragraph (g)(4)(i) or (ii) of this section.

(i) If you determine that the cause of the elevated mercury concentration is an open electrolyzer, decomposer, or other maintenance activity, you must record the information specified in paragraphs (g)(4)(i)(A) through (C) of this section.

(A) A description of the maintenance activity resulting in elevated mercury concentration;

(B) The time the maintenance activity was initiated and completed; and

(C) A detailed explanation how all the applicable requirements of Table 1 to this subpart were met during the maintenance activity.

(ii) If you determine that the cause of the elevated mercury concentration is not an open electrolyzer, decomposer, or other maintenance activity, you must follow the procedures specified in paragraphs (g)(4)(ii)(A) and (B) of this section until the mercury concentration falls below the action level. You must also keep all the associated records for these procedures as specified in Table 9 to this subpart.

(A) Within 1 hour of the time the action level was exceeded, you must conduct each inspection specified in Table 2 to this subpart, with the exception of the cell room floor and the pillars and beam inspections. You must correct any problem identified during these inspections in accordance with the requirements in Table 2 and 3 to this subpart.

(B) If the Table 2 inspections and subsequent corrective actions do not reduce the mercury concentration below the action level, you must inspect all decomposers, hydrogen system piping up to the hydrogen header, and other potential locations of mercury vapor leaks using a technique specified in Table 6 to this subpart. If a mercury vapor leak is identified, you must take the appropriate action specified in Table 3 to this subpart.
(b) For the applicable work practice standards in §63.8192, you must demonstrate initial compliance within 30 calendar days after the compliance date that is specified for your affected source in §63.8186.

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

You must conduct a performance test for each by-product hydrogen stream, end box ventilation system vent, and mercury thermal recovery unit vent according to the requirements in §63.7(e)(1) and the conditions detailed in paragraphs (a) through (d) of this section.

(a) You may not conduct performance tests during periods of startup, shutdown, or malfunction, as specified in §63.7(e)(1).

(b) For each performance test, you must develop a site-specific test plan in accordance with §63.7(c)(2).

(c) You must conduct at least three test runs to comprise a performance test, as specified in §63.7(e)(3) and in either paragraph (c)(1) or (2) of this section.

1. The sampling time and sampling volume for each run must be at least 2 hours and 1.70 dry standard cubic meters (dscm). Mercury results below the analytical laboratory’s detection limit must be reported using the reported analytical detection limit to calculate the sample concentration value and, in turn, the emission rate in the units of the standard; or

2. The sampling time for each test run must be at least 2 hours and the mercury concentration in each field sample analyzed must be at least two times the reported analytical detection limit.

(d) You must use the test methods specified in paragraphs (d)(1) through (4) of this section and the applicable test methods in paragraphs (d)(5) through (7) of this section.

1. Method 1 or 1A in appendix A of 40 CFR part 60 to determine the sampling port locations and the location and required number of sampling traverse points.

2. Method 2, 2A, 2C, or 2D in appendix A of 40 CFR part 60 to determine the stack gas velocity and volumetric flow rate.


4. Method 4 in appendix A of 40 CFR part 60 to determine the stack gas moisture content.

5. For each by-product hydrogen stream, Method 102 in appendix A of 40 CFR part 61 to measure the mercury emission rate after the last control device.

6. For each end box ventilation system vent, Method 101 or 101A in appendix A of 40 CFR part 61 to measure the mercury emission rate after the last control device.

7. For each mercury thermal recovery unit vent, Method 101 or 101A in appendix A of 40 CFR part 61 to measure the mercury emission rate after the last control device.

(e) During each test run for a by-product hydrogen stream and each test run for an end box ventilation system vent, you must continuously measure the electric current through the operating mercury cells and record a measurement at least once every 15 minutes.

(f) If the final control device is not a nonregenerable carbon adsorber and if you are demonstrating compliance using periodic monitoring under §63.8240(b), you must continuously monitor the parameters listed in paragraph (f)(1) of this section and establish your maximum or minimum monitoring value (as appropriate for your control device) using the requirements in paragraph (f)(2) of this section.

1. During the performance test specified in paragraphs (a) through (d) of this section, you must continuously monitor the control device parameters in paragraphs (f)(1)(i) through (vii) of this section and record a measurement at least once every 15 minutes.

   i. The exit gas temperature from uncontrolled streams;

   ii. The outlet temperature of the gas stream for the final (i.e., the farthest downstream) cooling system when no control devices other than coolers or demisters are used;
(iii) The outlet temperature of the gas stream from the final cooling system when the cooling system is followed by a molecular sieve or regenerative carbon adsorber;

(iv) Outlet concentration of available chlorine, pH, liquid flow rate, and inlet gas temperature of chlorinated brine scrubbers and hypochlorite scrubbers;

(v) The liquid flow rate and exit gas temperature for water scrubbers;

(vi) The inlet gas temperature of regenerative carbon adsorption systems; and

(vii) The temperature during the heating phase of the regeneration cycle for carbon adsorbers or molecular sieves.

(2) To establish a maximum monitoring value or minimum monitoring value, as appropriate for your final control device, you must average the recorded parameters in paragraphs (f)(1)(i) through (vi) of this section over the test period. If your final control device is a regenerative carbon adsorber, you must use the highest temperature reading measured in paragraph (f)(1)(vii) as the reference temperature in §63.8244(b)(2)(v).

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

(a) By-product hydrogen streams and end box ventilation system vents. You must determine the total grams of mercury per Megagram of chlorine production (g Hg/Mg Cl\textsubscript{2}) of chlorine produced from all by-product hydrogen streams and all end box ventilation system vents, if applicable, at a mercury cell chlor-alkali production facility, and you must follow the procedures in paragraphs (a)(1) through (6) of this section.

(1) Determine the mercury emission rate for each test run in grams per day for each by-product hydrogen stream and for each end box ventilation system vent, if applicable, from Method 101, 101A, or 102 (40 CFR part 61, appendix A).

(2) Calculate the average measured electric current through the operating mercury cells during each test run for each by-product hydrogen stream and for each end box ventilation system vent, if applicable, using Equation 1 of this section as follows:

\[
\text{CL}_{\text{avg,run}} = \frac{\sum_{i=1}^{n} \text{CL}_{i,\text{run}}}{n}
\]  

(Eq. 1)

Where:

- \(\text{CL}_{\text{avg,run}}\) = Average measured cell line current load during the test run, amperes;
- \(\text{CL}_{i,\text{run}}\) = Individual cell line current load measurement (i.e., 15 minute reading) during the test run, amperes; and
- \(n\) = Number of cell line current load measurements taken over the duration of the test run.

(3) Calculate the amount of chlorine produced during each test run for each by-product hydrogen stream and for each end box ventilation system vent, if applicable, using Equation 2 of this section as follows:

\[
\text{P}_{\text{Cl}_2,\text{run}} = (1.3 \times 10^{-6}) \left( \text{CL}_{\text{avg,run}} \right) \left( \text{CL}_{\text{avg,run}} \right) \left( \text{CL}_{\text{avg,run}} \right) \left( t_{\text{run}} \right)
\]  

(Eq. 2)

Where:

- \(\text{P}_{\text{Cl}_2,\text{run}}\) = Amount of chlorine produced during the test run, megagrams chlorine (Mg Cl\textsubscript{2});
- \(1.3 \times 10^{-6}\) = Theoretical chlorine production rate factor, Mg Cl\textsubscript{2} per hour per ampere per cell;
- \(\text{CL}_{\text{avg,run}}\) = Average measured cell line current load during test run, amperes, calculated using Equation 1 of this section;
- \(\text{n}_{\text{cells,run}}\) = Number of cells on-line during the test run; and
- \(t_{\text{run}}\) = Duration of test run, hours.

(4) Calculate the mercury emission rate in grams of mercury per megagram of chlorine produced for each test run for each by-product hydrogen stream and for each end box ventilation system vent, if applicable, using Equation 3 of this section as follows:
(3) Calculate the average mercury emission rate for each by-product hydrogen stream and for each end box ventilation system vent, if applicable, using Equation 4 of this section as follows:

\[ E_{Hg,\text{avg}} = \frac{\sum_{i=1}^{n} E_{Hg,\text{run}}}{n} \]  

(Eq. 4)

Where:
\( E_{Hg,\text{avg}} \) = Average mercury emission rate for the by-product hydrogen stream or the end box ventilation system vent, if applicable, g Hg/Mg Cl$_2$;  
\( E_{Hg,\text{run}} \) = Mercury emission rate for each test run for the by-product hydrogen stream or the end box ventilation system vent, if applicable, g Hg/Mg Cl$_2$, calculated using Equation 3 of this section; and  
\( n \) = Number of test runs conducted for the by-product hydrogen stream or the end box ventilation system vent, if applicable.

(6) Calculate the total mercury emission rate from all by-product hydrogen streams and all end box ventilation system vents, if applicable, at the mercury cell chlor-alkali production facility using Equation 5 of this section as follows:

\[ E_{Hg,H2EB} = \sum_{i=1}^{n} E_{Hg,\text{avg}} \]  

(Eq. 5)

Where:
\( E_{Hg,H2EB} \) = Total mercury emission rate from all by-product hydrogen streams and all end box ventilation system vents, if applicable, at the affected source, g Hg/Mg Cl$_2$;  
\( E_{Hg,\text{avg}} \) = Average mercury emission rate for each by-product hydrogen stream and each end box ventilation system vent, if applicable, g Hg/Mg Cl$_2$, determined using Equation 4 of this section; and  
\( n \) = Total number of by-product hydrogen streams and end box ventilation system vents at the affected source.

(b) Mercury thermal recovery vents.
You must determine the milligrams of mercury per dscm exhaust discharged from mercury thermal recovery unit vents, using the procedures in paragraphs (b)(1) and (2) of this section.

(1) Calculate the concentration of mercury in milligrams of mercury per dscm exhaust for each test run for each mercury thermal recovery unit vent using Equation 6 of this section as follows:

\[ C_{Hg,\text{run}} = \left( \frac{m_{Hg} \times 10^{-3}}{V_{\text{d}} \times (m_{\text{std}})} \right) \]  

(Eq. 6)

Where:
\( C_{Hg,\text{run}} \) = Mercury concentration for the test run, milligrams of mercury per dry standard cubic meter of exhaust;  
\( m_{Hg} \) = Mass of mercury in test run sample, from Method 101, 101A, or 102, micrograms;  
10$^{-3}$ = Conversion factor, milligrams per microgram; and  
\( V_{\text{d}} \times (m_{\text{std}}) \) = Dry gas sample volume at standard conditions, from Method 101, 101A, or 102, dry standard cubic meters.

(2) Calculate the average concentration of mercury in each mercury thermal recovery unit vent exhaust using Equation 7 of this section as follows:

\[ C_{Hg,\text{avg}} = \frac{\sum_{i=1}^{n} C_{Hg,\text{run}}}{n} \]  

(Eq. 7)

Where:
\( C_{Hg,\text{avg}} \) = Average mercury concentration for the mercury thermal recovery unit vent, milligrams of mercury per dry standard cubic meter exhaust;  
\( C_{Hg,\text{run}} \) = Mercury concentration for each test run, milligrams of mercury per dry standard cubic meter of exhaust, calculated using Equation 6 of this section; and  
\( n \) = Number of test runs conducted for the mercury thermal recovery unit vent.
§ 63.8236 How do I demonstrate initial compliance with the emission limitations and work practice standards?

(a) For each mercury cell chlor-alkali production facility, you have demonstrated initial compliance with the applicable emission limit for by-product hydrogen streams and end box ventilation system vents in § 63.8190(a)(2) if you comply with paragraphs (a)(1) and (2) of this section:

(1) Total mercury emission rate from all by-product hydrogen streams and all end box ventilation system vents, at the affected source, determined according to §§ 63.8232 and 63.8234(a), did not exceed the applicable emission limit in § 63.8190(a)(2)(i) or (ii); and

(2) If you have chosen the periodic monitoring option specified in § 63.8240(b) and your final control device is not a nonregenerable carbon adsorber, you have established a parameter value according to § 63.8232(f)(2).

(b) For each mercury recovery facility, you have demonstrated initial compliance with the applicable emission limit for mercury thermal recovery unit vents in § 63.8190(a)(3) if you comply with paragraphs (b)(1) and (2) of this section.

(1) Mercury concentration in each mercury thermal recovery unit vent exhaust, determined according to §§ 63.8232 and 63.8234(b), did not exceed the applicable emission limit in § 63.8190(a)(3)(i) or (ii); and

(2) If you have chosen the periodic monitoring option in § 63.8240(b) and have a final control device that is not a nonregenerable carbon adsorber, you have established a maximum or minimum monitoring value, as appropriate for your control device according to § 63.8232(f)(2).

(c) For each affected source, you have demonstrated initial compliance with the applicable work practice standards in § 63.8192 if you comply with paragraphs (c)(1) through (7) of this section.

(1) You certify in your Notification of Compliance Status that you are operating according to the continuous cell room monitoring program under § 63.8192(g) and you have established your action level according to § 63.8192(g)(2).

(2) You have submitted your washdown plan as part of your Notification of Compliance Status.

(3) You have submitted your continuous cell room monitoring plan, if applicable, as part of your Notification of Compliance Status.

(4) You have submitted records of the mass of virgin mercury added to cells for the 5 years preceding the applicable compliance date for your affected source as a part of the Notification of Compliance Status.

(5) You must submit the Notification of Compliance Status containing the results of the initial compliance demonstration according to the requirements in § 63.8253(e).

CONTINUOUS COMPLIANCE REQUIREMENTS

§ 63.8240 What are my monitoring requirements?

For each by-product hydrogen stream, each end box ventilation system vent, and each mercury thermal recovery unit vent, you must monitor the mercury emissions using the procedures in paragraph (a) or (b) of this section.

(a) You must continuously monitor the mercury concentration using a mercury continuous emissions monitor according to the requirements in §§ 63.8242(a) and 63.8244(a); or

(b) You must periodically monitor the mercury emissions according to the requirements in §§ 63.8242(b) and 63.8244(b).

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

(a) If you choose the continuous mercury monitoring option under
§ 63.8240(a), you must install, operate, and maintain each mercury continuous emissions monitor according to paragraphs (a)(1) through (5) of this section.

(1) Each mercury continuous emissions monitor must sample, analyze, and record the concentration of mercury at least once every 15 minutes.

(2) Each mercury continuous emissions monitor analyzer must have a detector with the capability to detect a mercury concentration at or below 0.5 times the mercury concentration level measured during the performance test conducted according to § 63.8232.

(3) In lieu of a promulgated performance specification as required in § 63.8(a)(2), you must develop a site-specific monitoring plan that addresses the elements in paragraphs (a)(3)(i) through (vi) of this section.

(i) Installation and measurement location downstream of the final control device for each by-product hydrogen stream, end box ventilation system vent, and mercury thermal recovery unit vent.

(ii) Performance and equipment specifications for the sample interface, the pollutant concentration analyzer, and the data collection and reduction system.

(iii) Performance evaluation procedures and acceptance criteria (i.e., calibrations).

(iv) Ongoing operation and maintenance procedures according to the requirements of §63.8(c)(1), (3), and (4)(ii).

(v) Ongoing data quality assurance procedures according to the requirements of §63.8(d).

(vi) Ongoing recordkeeping and reporting procedures in accordance with the general requirements of §63.10(c), (e)(1), and (e)(2)(i).

(4) You must conduct a performance evaluation of each mercury continuous emissions monitor according to your site-specific monitoring plan.

(5) You must operate and maintain each mercury continuous emissions monitor in continuous operation according to the site-specific monitoring plan.

(b) If you choose the periodic monitoring option and your final control device is not a nonregenerable carbon adsorber, you must install, operate, and maintain a continuous parameter monitoring system (CPMS) for each parameter specified in §63.8232(f)(1), according to §63.8(c).

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

(a) By-product hydrogen streams and end box ventilation system vents. For each consecutive 52-week period, you must determine the $g_{Hg/MgCl_2}$ produced from all by-product hydrogen streams and all end box ventilation system vents, if applicable, at a mercury cell chlor-alkali production facility using the procedures in paragraphs (a)(1) through (3) of this section. You must begin collecting data on the compliance date that is specified in §63.8186 for your affected source and calculate your first 52-week average mercury emission rate at the end of the 52nd week after the compliance date.

(1) Each week, you must determine the weekly mercury emission rate in grams per week for each by-product hydrogen stream and for each end box ventilation system vent, if applicable, using one of the monitoring options in paragraph (a)(1)(i) or (ii) of this section.

(i) Continuous mercury monitoring according to §§63.8242 and 63.8244(a).

(ii) Periodic monitoring according to §63.8244(b).

(2) Each week, you must determine the chlorine production and keep records of the production rate as required under §63.8256(b)(6).

(3) Beginning 52 weeks after the compliance date specified in §63.8186 for your affected source, you must calculate the 52-week average mercury emission rate from all by-product hydrogen steam and all end box ventilation system vents, if applicable, using Equation 1 of this section as follows:

$$E_{Hg} = \frac{\sum_{i=1}^{52} \left( \frac{R_{\text{week}_i}}{P_{\text{Cl}_2,\text{week}_i}} \right)}{52} \quad \text{(Eq. 1)}$$

Where:

$E_{Hg} =$ 52-week average mercury emission rate for week, $g_{Hg/MgCl_2}$;

$R_{\text{week}_i} =$ Mercury emission rate for week, from paragraph (a)(1) of this section, $g_{Hg}$ per week;
§ 63.8244 How do I monitor and collect data to demonstrate continuous compliance?

(a) Continuous monitoring option. You must monitor mercury concentration according to §63.8242(a) at all times that the affected source is operating with the exception of paragraphs (a)(1) and (2) of this section.

(1) 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 mercury emissions continuously (or collect data at all required intervals) at all times that the affected source is operating. Monitoring failures that are any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions.

(2) 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 or to fulfill a minimum data availability requirement, if applicable. You must use all the data collected during all other periods in assessing compliance.

(b) Mercury thermal recovery units. If you choose the continuous monitoring option in §63.8240(a), you must demonstrate continuous compliance using paragraph (b)(1) of this section. If you choose the periodic monitoring option in §63.8240(b), you must demonstrate continuous compliance using paragraph (b)(2) of this section.

(1) You must calculate the daily average mercury concentration using Equation 2 of this section as follows:

\[
C_{\text{Hg,dailyavg}} = \frac{1}{n} \sum_{i=1}^{n} C_{\text{Hg},i}
\]  
(Eq. 2)

Where:

- \(C_{\text{Hg,dailyavg}}\) = Average mercury concentration for the operating day, milligrams per dry standard cubic meter;
- \(C_{\text{Hg},i}\) = Concentration of mercury measured at the interval \(i\) (i.e., 15 minute reading) using a mercury continuous emission monitor, milligrams per dry standard cubic meter; and
- \(n\) = Number of concentration measurements taken during the operating day.

(2) You must calculate the daily average mercury concentration using the procedures in §63.8234(b).

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

(a) Continuous monitoring option. You must monitor mercury concentration according to §63.8242(a) at all times that the affected source is operating with the exception of paragraphs (a)(1) and (2) of this section.

(1) 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 mercury emissions continuously (or collect data at all required intervals) at all times that the affected source is operating. Monitoring failures that are any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions.

(2) 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 or to fulfill a minimum data availability requirement, if applicable. You must use all the data collected during all other periods in assessing compliance.

(b) Mercury thermal recovery units. If you choose the continuous monitoring option in §63.8240(a), you must demonstrate continuous compliance using paragraph (b)(1) of this section. If you choose the periodic monitoring option in §63.8240(b), you must demonstrate continuous compliance using paragraph (b)(2) of this section.

(1) You must calculate the daily average mercury concentration using Equation 2 of this section as follows:

\[
C_{\text{Hg,dailyavg}} = \frac{1}{n} \sum_{i=1}^{n} C_{\text{Hg},i}
\]  
(Eq. 2)

Where:

- \(C_{\text{Hg,dailyavg}}\) = Average mercury concentration for the operating day, milligrams per dry standard cubic meter;
- \(C_{\text{Hg},i}\) = Concentration of mercury measured at the interval \(i\) (i.e., 15 minute reading) using a mercury continuous emission monitor, milligrams per dry standard cubic meter; and
- \(n\) = Number of concentration measurements taken during the operating day.

(2) You must calculate the daily average mercury concentration using the procedures in §63.8234(b).
Environmental Protection Agency § 63.8246

(iv) If the hourly average monitoring value of any applicable parameter recorded under paragraph (b)(2)(ii) of this section is below the minimum monitoring value or above the maximum monitoring value of that same parameter established under § 63.8232(f)(2) for 24 consecutive hours, your monitoring value is out of range and you must take corrective action as soon as practicable. The hourly average monitoring value must be above the minimum monitoring value or below the maximum monitoring value as appropriate for that parameter, within 48 hours of the period that the monitoring value is out of range.

(v) If your final control device is a regenerative carbon adsorber, when the maximum hourly value of the temperature measured according to paragraph (b)(2)(iii) of this section is below the reference temperature determined according to § 63.8232(f)(2) for three consecutive regeneration cycles, your monitoring value is out of range and you must take corrective action as soon as practicable. During the first regeneration cycle following the period that your monitoring value is out of range, the maximum hourly value must be above the reference temperature recorded according to § 63.8232(f)(2).

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

(a) By-product hydrogen streams and end box ventilation system vents. (1) For all by-product hydrogen streams and all end box ventilation system vents, if applicable, you must demonstrate continuous compliance with the applicable mercury emission limit by reducing the mercury emissions data to 52-week averages using Equation 1 of § 63.8243 and maintaining the 52-week average mercury emissions no higher than the applicable limit. To determine the 52-week average mercury emissions, you must monitor in accordance with paragraph (a)(1)(i) or (ii) of this section.

(i) Continuous monitoring option. You must collect mercury emissions data according to § 63.8244(a), representing at least 75 percent of the 15-minute periods in each operating day of the 52-week compliance period (with data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities not counting toward the 75 percent requirement).

(ii) Periodic monitoring option. You must conduct at least three test runs per week to collect mercury emissions samples according to § 63.8244(b)(1) and (2)(i) and, if your final control device is not a nonregenerable carbon adsorber, you must collect data for monitoring values according to § 63.8244(b)(2)(ii) through (v).

(2) You must maintain records of mercury emissions and 52-week average values, as required in § 63.8256(b)(3) and (4). If your final control device is not a nonregenerable carbon adsorber, you must maintain records according to § 63.8256(d).

(b) Mercury thermal recovery unit vents. (1) For each mercury thermal recovery unit vent, you must demonstrate continuous compliance with the applicable emission limit specified in § 63.8190(a)(3) by maintaining the outlet mercury hourly-average concentration no higher than the applicable limit. To determine the outlet mercury concentration, you must monitor according to paragraph (b)(1)(i) or (ii) of this section.

(i) Continuous monitoring option. You must collect mercury concentration data according to § 63.8244(a), representing at least 75 percent of the 15-minute periods in the operating day (with data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities not counting toward the 75 percent requirement).

(ii) Periodic monitoring option. You must conduct at least three test runs per week to collect mercury emissions samples according to § 63.8244(b)(1) and (2)(i) and, if your final control device is not a nonregenerable carbon adsorber, you must collect data for monitoring values according to § 63.8244(b)(2)(ii) through (v).

(2) You must maintain records of mercury emissions and daily average values as required in § 63.8256(b)(3). If your final control device is not a nonregenerable carbon adsorber, you
§ 63.8248 What other requirements must I meet?

(a) Deviations. The instances specified in paragraphs (a)(1) through (4) of this section are deviations and must be reported according to the requirements in §63.8254.

(1) You must report each instance in which you did not meet each emission limitation in §63.8190 that applies to you. This includes periods of startup, shutdown, and malfunction.

(2) You must report each instance in which you did not meet each work practice standard in §63.8192 that applies to you. This includes periods of startup, shutdown, and malfunction.

(3) You must report each instance in which the corrective actions taken according to §63.8244(b)(2)(iv) did not result in average monitoring values being within range within 48 hours of the period that the monitoring value is out of range.

(4) You must report each instance in which the corrective action taken according to §63.8244(b)(2)(v) did not result in the maximum hourly temperature being above the reference temperature during the first regeneration cycle following the period that the monitoring value was out of range.

(b) Startups, shutdowns, and malfunctions. (1) Consistent with §§63.6(e) and 63.7(e)(1), deviations that occur during a period of startup, shutdown, or malfunction are not violations if you demonstrate to the Administrator’s satisfaction that you were operating in accordance with §63.6(e)(1).

(2) The Administrator will determine whether deviations that occur during a period of startup, shutdown, or malfunction are violations, according to the provisions in §63.6(e).

(3) By-passing the control device for maintenance activities is not considered a startup, shutdown, or malfunction event.

§ 63.8254 What reports must I submit and when?

(a) Compliance report due dates. You must submit a semiannual compliance report to your permitting authority according to the requirements in paragraphs (a)(1) through (4) of this section.

(1) The first compliance report must cover the period beginning on the compliance date that is specified for your affected source in §63.8186 and ending on June 30 or December 31, whichever date comes first after the compliance date that is specified for your affected source in §63.8186. (2) The first compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date comes first after your first compliance reporting period.

(3) 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) Each subsequent compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date comes first after the end of the semiannual reporting period.

(b) Compliance report contents. Each compliance report must contain the information in paragraphs (b)(1) through (3) of this section, and as applicable, paragraphs (b)(4) through (12) of this section.

(1) Company name and address.

(2) Statement by a responsible official, with that official’s name, title, and signature, certifying the truth, accuracy, and completeness of the report.

(3) Date of report and beginning and ending dates of the reporting period.

(4) If you had a startup, shutdown or malfunction during the reporting period and you took actions consistent with your startup, shutdown, and malfunction plan, the compliance report must include the information in §63.10(d)(5)(i).

(5) If there were no deviations from the continuous compliance requirements in §63.8246 that apply to you, a statement that there were no deviations from the emission limitations, work practice standards, and operation and maintenance standards during the reporting period.

(6) If there were no periods during which the mercury continuous emission monitor or CPMS (if applicable) were out-of-control as specified in §63.8(c)(7), a statement that there were no periods during which the mercury continuous emissions monitor or CPMS (if applicable) were out-of-control during the reporting period.

(7) For each deviation from the requirements for work practice standards in Tables 1 through 4 to this subpart that occurs at an affected source (including deviations where the response intervals were not adhered to as described in §63.8192(b)), the compliance report must contain the information in paragraphs (b)(1) through (4) of this section and the information in paragraphs (b)(7)(i) and (ii) of this section. This includes periods of startup, shutdown, and malfunction.

(i) The total operating time of each affected source during the reporting period.

(ii) Information on the number, duration, and cause of deviations (including unknown cause, if applicable), as applicable, and the corrective action taken.

(8) For each deviation from an emission limitation occurring at an affected source where you are using a mercury continuous emission monitor, according to the site-specific monitoring plan required in §63.8242(a)(3), to comply with the emission limitation in this subpart, you must include the information in paragraphs (b)(1) through (4) of this section and the information in paragraphs (b)(8)(i) through (xii) of
this section. This includes periods of startup, shutdown, and malfunction.

(i) The date and time that each malfunction started and stopped.

(ii) The date and time of each instance in which a continuous monitoring system was inoperative, except for zero (low-level) and high-level.

(iii) The date, time, and duration of each instance in which a continuous monitoring system was out-of-control, including the information in §63.8(c)(8).

(iv) The date and time that each deviation started and stopped, and whether each deviation occurred during a period of startup, shutdown, or malfunction or during another period.

(v) 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.

(vi) A breakdown of the total duration of the deviations during the reporting period including those that are due to startup, shutdown, control equipment problems, process problems, other known causes, and other unknown causes.

(vii) A summary of the total duration of continuous monitoring system downtime during the reporting period and the total duration of monitoring system downtime as a percent of the total source operating time during the reporting period.

(viii) An identification of each hazardous air pollutant that was monitored at the affected source.

(ix) A brief description of the process units.

(x) A brief description of the continuous monitoring system.

(xi) The date of the latest continuous monitoring system certification or audit.

(xii) A description of any changes in monitoring system, processes, or controls since the last reporting period.

(9) For each deviation from an operation and maintenance standard occurring at an affected source where you are using the periodic monitoring option specified in §63.8240(b) and your final control device is not a nonregenerable carbon adsorber, the compliance report must include the information in paragraphs (b)(1) through (4) of this section and the information in paragraphs (b)(9)(i) through (x) of this section. This includes periods of startups, shutdowns and malfunctions.

(i) The total operating time of each affected source during the reporting period.

(ii) Information on the number, duration, and cause of deviations (including unknown cause, if applicable), as applicable, whether the deviation occurred during a period of startup, shutdown, or malfunction, or other period, and the corrective action taken.

(iii) The date and time of each instance in which a CPMS was inoperative, except for zero (low-level) and high-level.

(iv) The date, time, and duration of each instance in which a CPMS was out-of-control, including the information specified in §63.8(c)(8).

(v) 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.

(vi) A breakdown of the total duration of the deviations during the reporting period including those that are due to startup, shutdown, control equipment problems, process problems, other known causes, and other unknown causes.

(vii) A summary of the total duration of continuous monitoring system downtime during the reporting period and the total duration of monitoring system downtime as a percent of the total source operating time during the reporting period.

(viii) A brief description of the CPMS.

(ix) The date of the latest CPMS certification or audit.

(x) A description of any changes in monitoring system, processes, or controls since the last reporting period.

(10) The compliance report must contain the mass of virgin mercury added to cells for the reporting period.

(11) The compliance report must contain each instance in which corrective actions taken under §63.8244(b)(2)(iv) did not result in average monitoring values being within range within 48 hours of the period that the monitoring value is out of range.
The compliance report must contain each instance in which corrective action taken according to §63.8244(b)(2)(v) did not result in the maximum hourly temperature being above the reference temperature during the first regeneration cycle following the period that the monitoring value was out of range.

Immediate startup, shutdown, and malfunction report. If you took an action during a startup, shutdown, or malfunction during the semiannual reporting period that was not consistent with your startup, shutdown, and malfunction plan required in §63.8226(b), and the source exceeded any applicable emission limitation in this subpart, you must submit an immediate startup, shutdown, and malfunction report according to the requirements in §63.10(d)(5)(i) and (ii).

Title V monitoring report. After your affected source has been issued a title V operating permit pursuant to 40 CFR part 70 or 40 CFR part 71, you must report all deviations from permit requirements and provide reports of any required monitoring in your semiannual monitoring report as required by 40 CFR 70.6(a)(3)(ii)(A) or 40 CFR 71.6(a)(3)(ii)(A). If you submit a semiannual compliance report for an affected source as required by this subpart as part of the semiannual monitoring report required by 40 CFR 70.6(a)(3)(ii)(A) or 40 CFR 71.6(a)(3)(ii)(A), and the semiannual compliance report includes all information required by the 40 CFR part 70 or 40 CFR part 71 semiannual monitoring report for the deviations that are reported in the semiannual compliance report, submission of the semiannual compliance report satisfies your obligation to report the same deviation information in the semiannual monitoring report. However, in such situations, the semiannual monitoring report must cross-reference the semiannual compliance report, and submission of a semiannual compliance report does not otherwise affect any obligation you may have to report deviations from permit requirements for an affected source to your permitting authority under 40 CFR part 70 or 40 CFR part 71.

What records must I keep?

(a) General records. You must keep the records in paragraphs (a)(1) and (2) 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 requirements in §63.10(b)(2)(xiv).

2. The records in §63.6(e)(3)(iii) through (v) related to startup, shutdown, and malfunction.

(b) Records associated with the by-product hydrogen stream and end box ventilation system vent emission limitations and the mercury thermal recovery unit vent emission limitations. You must keep the records in paragraphs (b)(1) through (5) of this section related to the emission limitations in §63.8190(a)(2) through (3) and (b).

1. Records of performance tests as required in §63.10(b)(2)(viii).

2. Records of the mercury emissions monitoring conducted during the performance tests.

3. Records of the continuous or periodic mercury emissions monitoring data.

4. Records of the 52-week rolling average mercury emissions.

5. Records associated with your site-specific monitoring plan required in §63.8242(a)(3) (i.e., results of inspections, calibrations, and validation checks of each mercury concentration continuous monitoring system (CMS)).

6. Records of chlorine production on a weekly basis.

(c) Records associated with the work practice standards.

1. If you choose not to institute a cell room monitoring program according to §63.8192(g) of this subpart, you must keep the records specified in paragraphs (c)(1)(i) through (v) of this section.

1. Records specified in Table 9 to this subpart related to the work practice standards in Tables 1 through 4 of this subpart.

2. Your current floor-level mercury vapor measurement plan.

3. Records of the average value calculated from at least three measurements taken according to your floor-
§ 63.8258 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 inspection and 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 on site for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to §63.10(b)(1). You can keep the records offsite for the remaining 3 years.

OTHER REQUIREMENTS AND INFORMATION

§ 63.8262 What parts of the General Provisions apply to me?

Table 10 to this subpart shows which parts of the General Provisions in §§63.1 through 63.13 apply to you.

§ 63.8264 Who implements and enforces this subpart?

(a) This subpart can be implemented and enforced by us, the United States Environmental Protection Agency (U.S. EPA), or a delegated authority such as your State, local, or tribal agency. If the EPA Administrator has delegated authority to your 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 subpart E of this part, the authorities contained in paragraph (c) of this section are retained by the EPA Administrator and are not transferred to the State, local, or tribal agency.

(c) The authorities in paragraphs (c)(1) through (4) of this section will not be delegated to State, local, or tribal agencies.
(1) Approval of alternatives under §63.6(g) to the non-opacity emission limitations in §63.8190 and work practice standards in §63.8192.

(2) Approval of major alternatives to test methods under §63.7(e)(2)(i) 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.

§63.8266 What definitions apply to this subpart?

Terms used in this subpart are defined in the CAA, in §63.2, and in this section as follows:

Aqueous liquid means a liquid mixture in which water is the predominant component.

Brine means an aqueous solution of alkali metal chloride, as sodium chloride salt solution or potassium chloride salt solution, that is used in the electrolyzer as a raw material.

By-product hydrogen stream means the hydrogen gas from each decomposer that passes through the hydrogen system and is burned as fuel, transferred to another process as raw material, or discharged directly to the atmosphere.

Caustic means an aqueous solution of alkali metal hydroxide, as sodium hydroxide or potassium hydroxide, that is produced in the decomposer.

Caustic basket means a fixture adjacent to the decomposer that contains a serrated funnel over which the caustic from the decomposer passes, breaking into droplets such that electric current is interrupted.

Caustic system means all vessels, piping, and equipment that convey caustic and remove mercury from the caustic stream. The caustic system begins at the decomposer and ends after the primary filters.

Cell room means a building or other structure in which one or more mercury cells are located.

Continuous parameter monitoring system, or CPMS, means the total equipment that may be required to meet the data acquisition and availability requirements of this subpart, used to sample, condition (if applicable), analyze, and provide a record of process of control system parameters.

Control device means a piece of equipment (such as condensers, coolers, chillers, heat exchangers, mist eliminators, absorption units, and adsorption units) that removes mercury from gaseous streams.

Decomposer means the component of a mercury cell in which mercury amalgam and water react in bed of graphite packing (within a cylindrical vessel), producing caustic and hydrogen gas and returning mercury to its elemental form for re-use in the process.

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 (including any operating limit) 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 title V operating permit for any affected source required to obtain such a permit;

(3) Fails to meet any emission limitation (including any operating limit) or work practice standard in this subpart during startup, shutdown, or malfunction, regardless of whether or not such failure is allowed by this subpart; or

(4) Fails to take corrective actions within 48 hours that result in parameter monitoring values being within range.

Electrolyzer means the main component of the mercury cell that consists of an elongated, shallow steel trough that holds a layer of mercury as a flowing cathode. The electrolyzer is enclosed by side panels and a top that suspends metal anodes. In the electrolyzer, brine is fed between a flowing mercury cathode and metal anodes in the presence of electricity to produce chlorine gas and an alkali metal-mercury amalgam (mercury amalgam).

Emission limitation means any emission limit or operating limit.

End box means a component of a mercury cell for transferring materials between the electrolyzer and the
decomposer. The inlet end box collects and combines raw materials at the inlet end of the cell, and the outlet end box separates and directs various materials either into the decomposer or out of the cell.

_End box ventilation system_ means all vessels, piping, and equipment that evacuate the head space of each mercury cell end box (and possibly other vessels and equipment) to the atmosphere. The end box ventilation system begins at the end box (and other vessel or equipment which is being evacuated) and terminates at the end box ventilation system vent. The end box ventilation system includes all control devices.

_End box ventilation system vent_ means the discharge point of the end box ventilation system to the atmosphere after all control devices.

_Hydrogen leak_ means hydrogen gas (containing mercury vapor) that is escaping from the decomposer or hydrogen system.

_Hydrogen system_ means all vessels, piping, and equipment that convey a by-product hydrogen stream. The hydrogen system begins at the decomposer and ends at the point just downstream of the last control device. The hydrogen system includes all control devices.

_In liquid mercury service_ means containing or coming in contact with liquid mercury.

_Liquid mercury accumulation_ means one or more liquid mercury droplets, or a pool of liquid mercury, present on the floor or other surface exposed to the atmosphere.

_Liquid mercury leak_ means the liquid mercury that is dripping or otherwise escaping from process equipment.

_Liquid mercury spill_ means a liquid mercury accumulation resulting from a liquid mercury that leaked from process equipment or that dripped during maintenance or handling.

_Mercury cell_ means a device consisting of an electrolyzer and decomposer, with one or more end boxes, a mercury pump, and other components linking the electrolyzer and decomposer.

_Mercury cell amalgam seal pot_ means a compartment through which mercury amalgam passes from an outlet end box to a decomposer.

_Mercury cell chlor-alkali plant_ means all contiguous or adjoining property that is under common control, where mercury cells are used to manufacture product chlorine, product caustic, and by-product hydrogen and where mercury may be recovered from wastes.

_Mercury cell chlor-alkali production facility_ means an affected source consisting of all cell rooms and ancillary operations used in the manufacture of product chlorine, product caustic, and by-product hydrogen at a mercury cell chlor-alkali plant.

_Mercury concentration CMS, or mercury concentration continuous monitoring system_, means a CMS, as defined in §63.2, that continuously measures the concentration of mercury.

_Mercury-containing wastes_ means waste materials containing mercury, which are typically classified under Resource Conservation and Recovery Act (RCRA) solid waste designations. K071 wastes are sludges from the brine system. K106 are wastewater treatment sludges. D009 wastes are non-specific mercury-containing wastes, further classified as either debris or nondebris (i.e., cell room sludges and carbon from decomposes).

_Mercury pump_ means a component of a mercury cell for conveying elemental mercury re-created in the decomposer to the beginning of the mercury cell. A mercury pump is typically found either as an in-line mercury pump (near a mercury suction pot or mercury seal pot) or submerged mercury pump (within a mercury pump tank or mercury pump seal).

_Mercury recovery facility_ means an affected source consisting of all processes and associated operations needed for mercury recovery from wastes at a mercury cell chlor-alkali plant.

_Mercury thermal recovery unit_ means the retort(s) where mercury-containing wastes are heated to volatilize mercury and the mercury recovery/control system (control devices and other equipment) where the retort off-gas is cooled, causing mercury to condense and liquid mercury to be recovered.
Mercury thermal recovery unit vent means the discharge point of the mercury thermal recovery unit to the atmosphere after all recovery/control devices. This term encompasses both oven type vents and non-oven type vents.

Mercury vacuum cleaner means a cleanup device used to draw a liquid mercury spill or accumulation (via suction pressure) into a closed compartment.

Non-oven type mercury thermal recovery unit vent means the discharge point to the atmosphere after all recovery/control devices of a mercury thermal recovery unit in which the retort is either a rotary kiln or single hearth retort.

Open-top container means any container that does not have a tight-fitting cover that keeps its contents from being exposed to the atmosphere.

Oven type mercury thermal recovery unit vent means the discharge point to the atmosphere after all recovery/control devices of a mercury thermal recovery unit in which each retort is a batch oven retort.

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

Retort means a furnace where mercury-containing wastes are heated to drive mercury into the gas phase. The types of retorts used as part of mercury thermal recovery units at mercury cell chlor-alkali plants include batch oven retorts, rotary kilns, and single hearth retorts.

Spalling means fragmentation by chipping.

Sump means a large reservoir or pit for wastewaters (primarily washdown waters).

Trench means a narrow channel or depression built into the length of a cell room floor that leads washdown materials to a drain.

Vent hose means a connection for transporting gases from the mercury cell.

Virgin mercury means mercury that has not been processed in an onsite mercury thermal recovery unit or otherwise recovered from mercury-containing wastes onsite.

Washdown means the act of rinsing a floor or surface with a stream of aqueous liquid to cleanse it of a liquid mercury spill or accumulation, generally by driving it into a trench.

Week means any consecutive seven-day period.

Work practice standard means any design, equipment, work practice, or operational standard, or combination thereof, that is promulgated pursuant to section 112(h) of the CAA.

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

As stated in §63.8192, you must meet the work practice standards in the following table:

<table>
<thead>
<tr>
<th>For . . .</th>
<th>You must . . .</th>
</tr>
</thead>
</table>
| 1. Cell rooms | a. For new or modified cell rooms, construct each cell room interior using materials that are resistant to absorption of mercury, resistant to corrosion, facilitate the detection of liquid mercury spills or accumulations, and are easy to clean.  
  b. Limit access around and beneath mercury cells in each cell room to prevent liquid mercury from being tracked into other areas.  
  c. Provide adequate lighting in each cell room to facilitate the detection of liquid mercury spills or accumulations.  
  d. Minimize the number of items stored around and beneath cells in each cell room.  
  a. Operate and maintain each electrolyzer, decomposer, end box, and mercury pump to minimize leakage of mercury.  
  b. Prior to opening an electrolyzer for maintenance, do the following: (1) Complete work that can be done before opening the electrolyzer in order to minimize the time required to complete maintenance when the electrolyzer is open; (2) fill the electrolyzer with an aqueous liquid, when possible; (3) allow the electrolyzer to cool before opening; and (4) schedule and staff maintenance of the electrolyzer to minimize the time the electrolyzer is open.  
  c. When the electrolyzer top is raised and before moving the top and anodes, thoroughly flush all visible mercury from the top and the anodes with an aqueous liquid, when possible.  
  d. While an electrolyzer is open, keep the bottom covered with an aqueous liquid or maintain a continuous flow of aqueous liquid, when possible.  
  e. During an electrolyzer side panel change, take measures to ensure an aqueous liquid covers or flows over the bottom, when possible.  
  f. Each time an electrolyzer is opened, inspect and replace components, as appropriate. |
For . . . You must . . .

3. Vessels in liquid mercury service.
   a. Store liquid mercury in containers with tight fitting covers.
   b. Maintain connections between the decomposer and the corresponding cell components, hydrogen system piping, and caustic system piping in good condition and keep the connections closed/tight, except when maintenance activities require opening/loosening these connections.
   c. Keep each mercury cell amalgam seal pot closed and sealed, except when operation or maintenance activities require the cover to be removed.
   d. Prior to opening a decomposer, do the following: fill the decomposer with an aqueous liquid to prevent mercury buildup after December 19, 2003, equip each new process line and piping system with smooth interiors and adequate low point drains or mercury knock-out pots to avoid liquid mercury buildup within the pipe and to facilitate mercury collection and recovery.
   e. Maintain a flow of aqueous liquid over the liquid mercury in each open-top container. Replenish the aqueous layer at least once per day.
   f. If you replace a vessel containing mercury that is intended to trap and collect mercury after December 19, 2003, replace it with a vessel that has a cone shaped bottom with a drain valve or other design that readily facilitates mercury collection.
   g. Maintain a layer of aqueous liquid on liquid mercury contained in trenches or drains and replenish the aqueous layer at least once per day.
   h. Maintain cell room floors such that they are smooth and free of cracking and spalling.
   i. Maintain the cell room floor to prevent mercury accumulation in the corners.
   j. After completing maintenance on an electrolyzer, check any mercury piping flanges that were opened for liquid mercury leaks.

4. Piping and process lines in liquid mercury service.
   a. To prevent mercury buildup after December 19, 2003, equip each new process line and piping system with smooth interiors and adequate low point drains or mercury knock-out pots to avoid liquid mercury buildup within the pipe and to facilitate mercury collection and recovery.
   b. Maintain a coating on cell room floors that is resistant to absorption of mercury and that facilitates the detection of liquid mercury spills or accumulations.
   c. Keep the cell room floor clean and free of debris.
   d. Maintain a layer of aqueous liquid on liquid mercury contained in trenches or drains and replenish the aqueous layer at least once per day.
   e. Keep each mercury pump tank closed, except when maintenance or operation activities require the cover to be removed.
   f. Maintain connections between the decomposer and the corresponding cell components, hydrogen system piping, and caustic system piping in good condition and keep the connections closed/tight, except when maintenance activities require opening/loosening these connections.
   g. Keep all bolts and C-clamps used to hold the covers in place when the cell is in service and when liquid mercury is flowing down the cell.
   h. Maintain each end box access port stopper in an end box cover in good sealing condition and keep each end box access port closed when the cell is in service and when liquid mercury is flowing down the cell.

5. Cell room floors
   a. Maintain a coating on cell room floors that is resistant to absorption of mercury and that facilitates the detection of liquid mercury spills or accumulations.
   b. Maintain each access port stopper in an end box cover in good sealing condition and keep each end box access port closed when the cell is in service and when liquid mercury is flowing down the cell.
   c. Maintain each end box cover in good condition and keep the end box closed when the cell is in service and when liquid mercury is flowing down the cell.
   d. Maintain a layer of aqueous liquid on liquid mercury contained in trenches or drains and replenish the aqueous layer at least once per day.
   e. Keep the cell room floor clean and free of debris.
   f. If you step into a liquid mercury spill or accumulation, either remove all visible mercury from your footwear or replace your footwear immediately.
   g. If you step into a liquid mercury bottom, either remove all visible mercury from your footwear or replace them immediately after stepping out of the electrolyzer.
   h. If an electrolyzer is disassembled for overhaul maintenance or for any other reason, chemically clean the bed plate or thoroughly flush it with an aqueous liquid.
   i. Before transporting each electrolyzer part to another work area, remove all visible mercury from the part or contain the part to prevent mercury from dripping during transport.
   j. After completing maintenance on an electrolyzer, check any mercury piping flanges that were opened for liquid mercury leaks.

6. End boxes
   a. Either equip each end box with a fixed cover that is leak tight, or route the end box head space to an end box ventilation system.
   b. For each end box ventilation system: maintain a flow of aqueous liquid over the liquid mercury in the end box and maintain the temperature of the aqueous liquid below its boiling point, maintain a negative pressure in the end box ventilation system, and maintain the end box ventilation system in good condition.
   c. Maintain each end box cover in good condition and keep the end box closed when the cell is in service and when liquid mercury is flowing down the cell, except when operation or maintenance activities require short-term access.
   d. Keep all bolts and C-clamps used to hold the covers in place when the cell is in service and when liquid mercury is flowing down the cell.
   e. Maintain each end box access port stopper in good condition and keep each end box access port closed when the cell is in service and when liquid mercury is flowing down the cell.
   f. Maintain a layer of aqueous liquid on liquid mercury contained in trenches or drains and replenish the aqueous layer at least once per day.
   g. Keep all bolts and C-clamps used to hold the covers in place when the cell is in service and when liquid mercury is flowing down the cell.
   h. Maintain connections between the decomposer and the corresponding cell components, hydrogen system piping, and caustic system piping in good condition and keep the connections closed/tight, except when maintenance activities require opening/loosening these connections.
   i. Keep each mercury cell amalgam seal pot closed and sealed, except when operation or maintenance activities require the cover to be removed.
   j. Prior to opening a decomposer, do the following: fill the decomposer with an aqueous liquid to prevent mercury buildup after December 19, 2003, equip each new process line and piping system with smooth interiors and adequate low point drains or mercury knock-out pots to avoid liquid mercury buildup within the pipe and to facilitate mercury collection and recovery.

7. Decomposers
   a. Maintain each decomposer cover in good condition and keep each decomposer closed and sealed, except when maintenance activities require the cover to be removed.
   b. Maintain connections between the decomposer and the corresponding cell components, hydrogen system piping, and caustic system piping in good condition and keep the connections closed/tight, except when maintenance activities require opening/loosening these connections.
   c. Keep each mercury cell amalgam seal pot closed and sealed, except when operation or maintenance activities require the cover to be removed.
   d. Prior to opening a decomposer, do the following: fill the decomposer with an aqueous liquid to prevent mercury buildup after December 19, 2003, equip each new process line and piping system with smooth interiors and adequate low point drains or mercury knock-out pots to avoid liquid mercury buildup within the pipe and to facilitate mercury collection and recovery.
   e. Take precautions to avoid mercury spills when changing graphite grids or balls in horizontal decomposers or graphite packing in vertical decomposers. If a spill occurs, you must clean it up in accordance with the requirements in Table 3 to this subpart.
   f. After each maintenance activity, use an appropriate technique (Table 6 to this subpart) to check for hydrogen leaks.
   g. Before transporting any internal part from the decomposer (such as the graphite basket) to another work area, remove all visible mercury from the part or contain the part to prevent mercury from dripping during transport.
   h. Store carbon from decomposers in accordance with the requirements in 40 CFR part 265, subparts I and CC, until the carbon is treated or is disposed.

8. Submerged mercury pumps
   a. Maintain a coating on cell room floors that is resistant to absorption of mercury and that facilitates the detection of liquid mercury spills or accumulations.
   b. Maintain each access port stopper in an end box cover in good sealing condition and keep each end box access port closed when the cell is in service and when liquid mercury is flowing down the cell.
   c. Maintain each end box cover in good condition and keep the end box closed when the cell is in service and when liquid mercury is flowing down the cell.
   d. Maintain a layer of aqueous liquid on liquid mercury contained in trenches or drains and replenish the aqueous layer at least once per day.
   e. Keep the cell room floor clean and free of debris.
   f. If you step into a liquid mercury spill or accumulation, either remove all visible mercury from your footwear or replace your footwear immediately.
   g. If you step into a liquid mercury bottom, either remove all visible mercury from your footwear or replace them immediately after stepping out of the electrolyzer.
   h. If an electrolyzer is disassembled for overhaul maintenance or for any other reason, chemically clean the bed plate or thoroughly flush it with an aqueous liquid.
   i. Before transporting each electrolyzer part to another work area, remove all visible mercury from the part or contain the part to prevent mercury from dripping during transport.
   j. After completing maintenance on an electrolyzer, check any mercury piping flanges that were opened for liquid mercury leaks.

   a. Maintain a layer of aqueous liquid over liquid mercury in each open-top container. Replenish the aqueous layer at least once per day and, when necessitated by operating procedures or observation, collect the liquid mercury from the container in accordance with the requirements in Table 4 to this subpart.
   b. Store liquid mercury in containers with tight fitting covers.
   c. Maintain the seals on the covers in good condition.
### Table 2 to Subpart IIII of Part 63—Work Practice Standards—Required Inspections

As stated in §63.8192, you must meet the work practice standards in the following table:

<table>
<thead>
<tr>
<th>You must inspect . . .</th>
<th>At least once each . . .</th>
<th>And if you find . . .</th>
<th>You must . . .</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Each vent hose on each mercury cell.</td>
<td>Half day ...............</td>
<td>A leaking vent hose ..........</td>
<td>Take action immediately to correct the leak.</td>
</tr>
<tr>
<td>2. Each open-top container holding liquid mercury.</td>
<td>Half day ...............</td>
<td>Liquid mercury that is not covered by an aqueous liquid.</td>
<td>Take action immediately to cover the liquid mercury with an aqueous liquid.</td>
</tr>
<tr>
<td>3. Each end box ...............</td>
<td>Half day ...............</td>
<td>a. An end box cover not securely in place.</td>
<td>Take action immediately to put the end box cover securely in place.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>b. An end box stopper not securely in place.</td>
<td>Take action immediately to put the end box stopper securely in place.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>c. Liquid mercury in an end box that is not covered by an aqueous liquid at a temperature below boiling.</td>
<td>Take action immediately to cover the liquid mercury with an aqueous liquid.</td>
</tr>
<tr>
<td>4. Each mercury amalgam seal pot.</td>
<td>Half day ...............</td>
<td>A seal pot cover that is not securely in place.</td>
<td>Take action immediately to put the seal pot cover securely in place.</td>
</tr>
<tr>
<td>5. Each mercury seal pot ..........</td>
<td>Half day ...............</td>
<td>A mercury seal pot stopper not securely in place.</td>
<td>Take action immediately to put the mercury seal pot stopper securely in place.</td>
</tr>
<tr>
<td>6. Cell room floors ...............</td>
<td>Month ...............</td>
<td>Cracks, spalling, or other deficiencies that could cause liquid mercury to become trapped.</td>
<td>Repair the crack, spalling, or other deficiency within 1 month from the time you identify the deficiency.</td>
</tr>
<tr>
<td>7. Pillars and beams ..........</td>
<td>6 months ...............</td>
<td>Cracks, spalling, or other deficiencies that could cause liquid mercury to become trapped.</td>
<td>Repair the crack, spalling, or other deficiency within 1 month from the time you identify the deficiency.</td>
</tr>
<tr>
<td>8. Each caustic basket ...............</td>
<td>Half day ...............</td>
<td>A caustic basket cover that is not securely in place.</td>
<td>Take action immediately to put the caustic basket cover securely in place.</td>
</tr>
<tr>
<td>9. All equipment and piping in the caustic system.</td>
<td>Day ...............</td>
<td>Equipment that is leaking caustic</td>
<td>Initiate repair of the leaking equipment within 72 hours from the time you identify the caustic leak.</td>
</tr>
<tr>
<td>10. All floors and other surfaces where liquid mercury could accumulate in cell rooms and other production facilities and in mercury recovery facilities.</td>
<td>Half day ...............</td>
<td>A liquid mercury spill or accumulation.</td>
<td>Take the required action specified in Table 3 to this subpart.</td>
</tr>
</tbody>
</table>
As stated in §63.8192, you must meet the work practice standards in the following table:

<table>
<thead>
<tr>
<th>Required Action</th>
<th>Time Frame</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Liquid mercury spill or accumulation</td>
<td>Day</td>
<td>a. Initiate clean up of the liquid mercury spill or accumulation as soon as possible, but no later than 1 hour from the time you detect it.</td>
</tr>
<tr>
<td>2. Equipment that is leaking liquid mercury</td>
<td>Half day</td>
<td>a. Contain the liquid mercury dripping from the leaking equipment by placing a container under the leak within 30 minutes from the time you identify the liquid mercury leak.</td>
</tr>
<tr>
<td>3. Decomposer or hydrogen system piping up to the hydrogen header that is leaking hydrogen and/or mercury vapor</td>
<td>3 months</td>
<td>a. Make a first attempt at stopping the leak within 1 hour from the time you identify the hydrogen and/or mercury vapor leak.</td>
</tr>
<tr>
<td>4. Equipment in the hydrogen system from the start of the hydrogen header to the last control device, that is leaking hydrogen and/or mercury vapor.</td>
<td>3 months</td>
<td>a. Make a first attempt at stopping the leak within 4 hours from the time you identify the hydrogen and/or mercury vapor leak.</td>
</tr>
</tbody>
</table>

You must inspect . . . At least once each . . . And if you find . . . You must . . .
During a required inspection or at any other time, if you find... You must...
c. You can delay repair of equipment leaking hydrogen and/or mercury vapor if you isolate the leaking equipment.

Table 4 to Subpart IIII of Part 63—Work Practice Standards—Requirements for Mercury Liquid Collection

As stated in §63.8192, you must meet the work practice standards in the following table:

<table>
<thead>
<tr>
<th>You must collect liquid mercury from . . .</th>
<th>At the following intervals</th>
<th>When collecting the mercury, you must meet these requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Open-top containers.</td>
<td>a. At least once each 72 hours.</td>
<td>i. If you spill liquid mercury during collection or transport, you must take the action specified in Table 3 to this subpart for liquid mercury spills and accumulations.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>ii. From the time that you collect liquid mercury into a temporary container until the time that you store the liquid mercury, you must keep it covered by an aqueous liquid.</td>
</tr>
<tr>
<td>2. Vessels, low point drains, mercury knock-out pots, and other closed mercury collection points.</td>
<td>a. At least once each week.</td>
<td>See 1.a.i through iii above.</td>
</tr>
<tr>
<td>3. All other equipment.</td>
<td>a. Whenever maintenance activities require the opening of the equipment.</td>
<td>See 1.a.i through iii above.</td>
</tr>
</tbody>
</table>

Table 5 to Subpart IIII of Part 63—Required Elements of Floor-Level Mercury Vapor Measurement and Cell Room Monitoring Plans

Your Floor-Level Mercury Vapor Measurement Plan required by §63.8192(d) and Cell Room Monitoring Plan required by §63.8192(g) must contain the elements listed in the following table:

<table>
<thead>
<tr>
<th>You must specify in your plan . . .</th>
<th>Additional requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Floor-Level Mercury Vapor Measurement Plan</td>
<td>The locations must be representative of the entire cell room floor area. At a minimum you must measure the level of mercury vapor above mercury-containing cell room equipment, as well as areas around the cells, decomposes, or other mercury-containing equipment.</td>
</tr>
<tr>
<td>1. Locations in the cell room where you will measure the level of mercury vapor.</td>
<td>If an instrument or other equipment is used, the plan must include manufacturer specifications and calibration procedures. The plan must also include a description of how you will ensure that the instrument will be calibrated and maintained according to manufacturer specifications.</td>
</tr>
<tr>
<td>2. Equipment or sampling and analytical methods that you will use to measure the level of mercury vapor.</td>
<td></td>
</tr>
</tbody>
</table>

379
You must specify in your plan . . .

3. Measurement frequency ........................ Measurement must take place at least once each half day.

4. Number of measurements ...................... At least three readings must be taken at each sample location and the average of these readings must be recorded.

5. A floor-level mercury concentration action level ........................ The action level may not be higher than 0.05 mg/m³.

Cell Room Monitoring Plan

1. Details of your mercury monitoring system. Include some pre-plan measurements to demonstrate the profile of mercury concentration in the cell room and how the selected sampling locations ensure conducted representativeness.

2. How representative sampling will be conducted Include a description of how you will keep records or other means to demonstrate that the system is operating properly.

3. Quality assurance/quality control procedures for your mercury monitoring system. Include the background data used to establish your level.

4. Your action level ...................................... Include the background data used to establish your level.

Table 6 to Subpart IIIII of Part 63—Examples of Techniques for Equipment Problem Identification, Leak Detection and Mercury Vapor

As stated in Tables 1 and 2 of Subpart IIIII, examples of techniques for equipment problem identification, leak detection and mercury vapor measurements can be found in the following table:

<table>
<thead>
<tr>
<th>To detect . . .</th>
<th>You could use . . .</th>
<th>Principle of detection . . .</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Leaking vent hoses; liquid mercury that is not covered by an aqueous liquid in open-top containers or end boxes; end box covers or stoppers, amalgam seal pot stoppers, or caustic basket covers not securely in place; cracks or spalling in cell room floors, pillars, or beams; caustic leaks; liquid mercury accumulations or spills; and equipment that is leaking liquid mercury.</td>
<td>Visual inspections</td>
<td></td>
</tr>
<tr>
<td>2. Equipment that is leaking hydrogen and/or mercury vapor during inspections required by Table 2 to this subpart.</td>
<td>a. Auditory and visual inspections</td>
<td></td>
</tr>
<tr>
<td></td>
<td>b. Portable mercury vapor analyzer—ultraviolet light absorption detector.</td>
<td>A sample of gas is drawn through a detection cell where ultraviolet light at 253.7 nanometers (nm) is directed perpendicularly through the sample toward a photodetector. Elemental mercury absorbs the incident light in proportion to its concentration in the air stream.</td>
</tr>
<tr>
<td></td>
<td>c. Portable mercury vapor analyzer—gold film amalgamation detector.</td>
<td>A sample of gas is drawn through a detection cell containing a gold film detector. Elemental mercury amalgamates with the gold film, changing the resistance of the detector in proportion to the mercury concentration in the air sample.</td>
</tr>
<tr>
<td></td>
<td>d. Portable short-wave ultraviolet light, fluorescent background—visual indication.</td>
<td>Ultraviolet light is directed toward a fluorescent background positioned behind a suspected source of mercury emissions. Elemental mercury vapor absorbs the ultraviolet light, projecting a dark shadow image on the fluorescent background.</td>
</tr>
<tr>
<td>3. Level of mercury vapor in the cell room and other areas.</td>
<td>a. Portable combustible gas meter.</td>
<td>See item 2.b.</td>
</tr>
<tr>
<td></td>
<td>b. Portable mercury vapor analyzer—ultraviolet light absorption detector.</td>
<td>See item 2.c.</td>
</tr>
</tbody>
</table>
Environmental Protection Agency

**Pt. 63, Subpt. IIIII, Table 9**

<table>
<thead>
<tr>
<th>To detect . . .</th>
<th>You could use . . .</th>
<th>Principle of detection . . .</th>
</tr>
</thead>
<tbody>
<tr>
<td>c. Permanganate impingement</td>
<td>A known volume of gas sample is absorbed in potassium permanganate solution. Elemental mercury in the solution is determined using a cold vapor adsorption analyzer, and the concentration of mercury in the gas sample is calculated.</td>
<td></td>
</tr>
</tbody>
</table>

**Table 7 to Subpart IIIII of Part 63—Required Elements of Washdown Plans**

As stated in §63.8192, your written washdown plan must address the elements contained in the following table:

For each of the following areas . . . You must establish the following as part of your plan . . .

<table>
<thead>
<tr>
<th>Area</th>
<th>Requirement</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Center aisles of cell rooms</td>
<td>A description of the manner of washdown of the area, and the washdown frequency for the area.</td>
</tr>
<tr>
<td>2. Electrolyzers</td>
<td></td>
</tr>
<tr>
<td>3. End boxes and areas under end boxes</td>
<td></td>
</tr>
<tr>
<td>4. Decomposers and areas under decomposers</td>
<td></td>
</tr>
<tr>
<td>5. Caustic baskets and areas around caustic baskets</td>
<td></td>
</tr>
<tr>
<td>6. Hydrogen system piping</td>
<td></td>
</tr>
<tr>
<td>7. Basement floor of cell rooms</td>
<td></td>
</tr>
<tr>
<td>8. Tanks</td>
<td></td>
</tr>
<tr>
<td>9. Pillars and beams in cell rooms</td>
<td></td>
</tr>
<tr>
<td>10. Mercury cell repair areas</td>
<td></td>
</tr>
<tr>
<td>11. Maintenance shop areas</td>
<td></td>
</tr>
<tr>
<td>12. Work tables</td>
<td></td>
</tr>
<tr>
<td>13. Mercury thermal recovery units</td>
<td></td>
</tr>
<tr>
<td>14. Storage areas for mercury-containing wastes</td>
<td></td>
</tr>
</tbody>
</table>

**Table 8 to Subpart IIIII of Part 63—Requirements for Cell Room Monitoring Program**

As stated in §63.8192(g)(1), your mercury monitoring system must meet the requirements contained in the following table:

If you utilize an . . . Your . . . Must . . .

<table>
<thead>
<tr>
<th>System Type</th>
<th>Mercury Vapor Analyzer</th>
<th>Sampling System</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Extractive cold vapor spectroscopy system.</td>
<td>a. Mercury vapor analyzer</td>
<td>Be capable of continuously monitoring the elemental mercury concentration with a detection level at least two times lower than the baseline mercury concentration in the cell room.</td>
</tr>
<tr>
<td></td>
<td>b. Sampling system</td>
<td>Obtain measurements at three or more locations along the center aisle of the cell room at a height sufficient to ensure that sample is representative of the entire cell room. One sampling location must be above the midpoint of the center aisle, and the other two an equidistance between the midpoint and the end of the cells.</td>
</tr>
<tr>
<td>2. Open path differential optical absorption spectroscopy system.</td>
<td>a. Mercury vapor analyzer</td>
<td>Be capable of continuously monitoring the elemental mercury concentration with a detection level at least two times lower than the baseline mercury concentration in the cell room.</td>
</tr>
<tr>
<td></td>
<td>b. Path</td>
<td>Be directed along the center aisle at a height sufficient to ensure that the sample is representative of the entire cell room.</td>
</tr>
</tbody>
</table>

**Table 9 to Subpart IIIII of Part 63—Required Records for Work Practice Standards**

As stated in §63.8256(c), you must keep the records (related to the work practice standards) specified in the following table:

For each . . . You must record the following information . . .

<table>
<thead>
<tr>
<th>Inspection</th>
<th>Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Inspection required by Table 2 to this subpart</td>
<td>Date and time the inspection was conducted.</td>
</tr>
</tbody>
</table>
For each . . .

You must record the following information . . .

2. Situation found during an inspection required by Table 2 to this subpart: leaking vent hose; open-top container where liquid mercury is not covered by an aqueous liquid; seal pot cover that is not securely in place; open mercury seal pot stopper that is not securely in place; crack, spalling, or other deficiency in a cell room floor, pillar, or beam that could cause liquid mercury to become trapped; or caustic basket that is not securely in place.

| a. Description of the condition. |
| b. Location of the condition. |
| c. Date and time you identify the condition. |
| d. Description of the corrective action taken. |
| e. Date and time you successfully complete the corrective action. |

3. Caustic leak during an inspection required by Table 2 to this subpart.

| a. Location of the leak. |
| b. Date and time you identify the leak. |
| c. Date and time you successfully stop the leak and repair the leaking equipment. |
| d. Estimate of the weight of liquid mercury. |
| e. Date and time you detect the liquid mercury spill or accumulation. |
| f. Method you use to clean up the liquid mercury spill or accumulation. |
| g. Date and time when you clean up the liquid mercury spill or accumulation. |
| h. Source of the liquid mercury spill or accumulation. |
| i. If the source of the liquid mercury spill or accumulation is not identified, the time when you reinspect the area. |

4. Liquid mercury spill or accumulation identified during an inspection required by Table 2 to this subpart or at any other time.

| a. Location of the liquid mercury spill or accumulation. |
| b. Estimate of the weight of liquid mercury. |
| c. Date and time you detect the liquid mercury spill or accumulation. |
| d. Method you use to clean up the liquid mercury spill or accumulation. |
| e. Date and time when you clean up the liquid mercury spill or accumulation. |
| f. Source of the liquid mercury spill or accumulation. |
| g. If the source of the liquid mercury spill or accumulation is not identified, the time when you reinspect the area. |

5. Liquid mercury leak or hydrogen leak identified during an inspection required by Table 2 to this subpart or at any other time.

| a. Location of the leak. |
| b. Date and time you identify the leak. |
| c. If the leak is a liquid mercury leak, the date and time that you successfully contain the dripping liquid mercury. |
| d. Date and time you first attempt to stop the leak. |
| e. Date and time you successfully stop the leak and repair the leaking equipment. |
| f. If you take a cell off line or isolate the leaking equipment, the date and time you take the cell off line or isolate the leaking equipment, and the date and time you put the cell or isolated equipment back into service. |

6. Occasion for which it is not possible to perform the design, operation and maintenance procedures required by Item 2 of Table 1 to this subpart.

| a. Reason for not being able to perform each procedure determined to be not possible. |
| b. Actions taken to reduce or prevent mercury emissions, in lieu of the requirements in Table 1 to this subpart. |

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

As stated in §63.8262, you must comply with the applicable General Provisions requirements according to the following table:

<table>
<thead>
<tr>
<th>Citation</th>
<th>Subject</th>
<th>Applies to Subpart IIIII</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>§ 63.1</td>
<td>Applicability</td>
<td>Yes.</td>
<td></td>
</tr>
<tr>
<td>§ 63.2</td>
<td>Definitions</td>
<td>Yes.</td>
<td></td>
</tr>
<tr>
<td>§ 63.3</td>
<td>Units and Abbreviations</td>
<td>Yes.</td>
<td></td>
</tr>
<tr>
<td>§ 63.4</td>
<td>Prohibited Activities</td>
<td>Yes.</td>
<td></td>
</tr>
<tr>
<td>§ 63.5</td>
<td>Construction/Reconstruction Compliance with Standards and Maintenance Requirements.</td>
<td>Yes.</td>
<td></td>
</tr>
<tr>
<td>§ 63.6(a)-(g), (i), (j)</td>
<td>Compliance with Opacity and Visible Emission Standards.</td>
<td>No.</td>
<td>Subpart IIIII does not have opacity and visible emission standards.</td>
</tr>
<tr>
<td>§ 63.7(a)(1), (b)–(h)</td>
<td>Performance Testing Requirements.</td>
<td>Yes.</td>
<td>Subpart IIIII specifies additional requirements related to site-specific test plans and the conduct of performance tests.</td>
</tr>
<tr>
<td>§ 63.7(a)(2)</td>
<td>Applicability and Performance Test Dates.</td>
<td>No.</td>
<td>Subpart IIIII requires the performance test to be performed on the compliance date.</td>
</tr>
<tr>
<td>§ 63.8(a)(1), (a)(3); (b); (c)(1)–(4), (6)–(8); (d); (e); and (f)(1)–(5).</td>
<td>Monitoring Requirements</td>
<td>Yes.</td>
<td></td>
</tr>
</tbody>
</table>

382
Environmental Protection Agency

§ 63.8385

<table>
<thead>
<tr>
<th>Citation</th>
<th>Subject</th>
<th>Applies to Subpart IIII</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>§ 63.8(a)(2)</td>
<td>Continuous Monitoring System (CMS) Requirements.</td>
<td>No</td>
<td>Subpart IIII requires a site-specific monitoring plan in lieu of a promulgated performance specification for a mercury concentration CMS.</td>
</tr>
<tr>
<td>§ 63.8(a)(4)</td>
<td>Additional Monitoring Requirements for Control Devices in § 63.11.</td>
<td>No</td>
<td>Subpart IIII does not require flares.</td>
</tr>
<tr>
<td>§ 63.8(c)(5)</td>
<td>COMS Minimum Procedures</td>
<td>No</td>
<td>Subpart IIII does not have opacity and visible emission standards.</td>
</tr>
<tr>
<td>§ 63.8(f)(6)</td>
<td>Alternative to Relative Accuracy Test.</td>
<td>No</td>
<td>Subpart IIII does not require CEMS.</td>
</tr>
<tr>
<td>§ 63.8(g)</td>
<td>Data Reduction</td>
<td>No</td>
<td>Subpart IIII specifies mercury concentration CMS data reduction requirements.</td>
</tr>
<tr>
<td>§ 63.9(a)–(e), (g)–(i)</td>
<td>Notification Requirements</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>§ 63.9(f)</td>
<td>Notification of VE/Opacity Test.</td>
<td>No</td>
<td>Subpart IIII does not have opacity and visible emission standards.</td>
</tr>
<tr>
<td>§ 63.10(a); (b)(1); (b)(2)(i)–(xii), (xv); (b)(3); (c); (d)(1)–(2), (4)–(5); (e); (f).</td>
<td>Recordkeeping/Reporting</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>§ 63.10(b)(2)(xii)</td>
<td>CMS Records for RATA Alternative.</td>
<td>No</td>
<td>Subpart IIII does not require CEMS.</td>
</tr>
<tr>
<td>§ 63.10(d)(3)</td>
<td>ReportingOpacity or VE Observations.</td>
<td>No</td>
<td>Subpart IIII does not have opacity and visible emission standards.</td>
</tr>
<tr>
<td>§ 63.11</td>
<td>Flares</td>
<td>No</td>
<td>Subpart IIII does not require flares.</td>
</tr>
<tr>
<td>§ 63.12</td>
<td>Delegation</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>§ 63.13</td>
<td>Addresses</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>§ 63.14</td>
<td>Incorporation by Reference</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>§ 63.15</td>
<td>Availability of Information</td>
<td>Yes</td>
<td></td>
</tr>
</tbody>
</table>

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

SOURCE: 80 FR 65520, Oct. 26, 2015, unless otherwise noted.

WHAT THIS SUBPART COVERS

§ 63.8380 What is the purpose of this subpart?

This subpart establishes national emission limitations for hazardous air pollutants (HAP) emitted from brick and structural clay products (BSCP) manufacturing facilities. This subpart also establishes requirements to demonstrate initial and continuous compliance with the emission limitations.

§ 63.8385 Am I subject to this subpart?

You are subject to this subpart if you own or operate a BSCP manufacturing facility that is, is located at, or is part of, a major source of HAP emissions according to the criteria in paragraphs (a) and (b) of this section.

(a) A BSCP manufacturing facility is a plant site that manufactures brick (including, but not limited to, face brick, structural brick, and brick pavers); clay pipe; roof tile; extruded floor and wall tile; and/or other extruded, dimensional clay products. Brick and structural clay products manufacturing facilities typically process raw clay and shale, form the processed materials into bricks or shapes, and dry and fire the bricks or shapes. A plant site that manufactures refractory products, as defined in §63.9624, or clay ceramics, as defined in §63.8665, is not a BSCP manufacturing facility.

(b) A major source of HAP emissions is any stationary source or group of stationary sources within a contiguous area under common control that emits or has the potential to emit any single HAP at a rate of 9.07 megagrams (10 tons) or more per year or any combination of HAP at a rate of 22.68 megagrams (25 tons) or more per year.
§ 63.8390 What parts of my plant does this subpart cover?

(a) This subpart applies to each existing, new, or reconstructed affected source at a BSCP manufacturing facility.

(b) For the purposes of this subpart, the affected sources are described in paragraphs (b)(1) and (2) of this section.

(1) All tunnel kilns at a BSCP manufacturing facility are an affected source. For the remainder of this subpart, a tunnel kiln with a design capacity equal to or greater than 9.07 megagrams per hour (Mg/hr) (10 tons per hour (tph)) of fired product will be called a large tunnel kiln, and a tunnel kiln with a design capacity less than 9.07 Mg/hr (10 tph) of fired product will be called a small tunnel kiln.

(2) Each periodic kiln is an affected source.

(c) Process units not subject to the requirements of this subpart are listed in paragraphs (c)(1) through (4) of this section.

(1) Kilns that are used exclusively for setting glazes on previously fired products are not subject to the requirements of this subpart.

(2) Raw material processing and handling.

(3) Dryers.

(4) Sources covered by subparts KKKKK and SSSSS of this part.

(d) A source is a new affected source if construction of the affected source began after December 18, 2014, and you met the applicability criteria at the time you began construction.

(e) An affected source is reconstructed if you meet the criteria as defined in §63.2.

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

§ 63.8405 What emission limitations and work practice standards must I meet?

(a) You must meet each emission limit in Table 1 to this subpart that applies to you.

(b) You must meet each operating limit in Table 2 to this subpart that applies to you.

(c) You must meet each work practice standard in Table 3 to this subpart that applies to you.

§ 63.8410 What are my options for meeting the emission limitations and work practice standards?

(a) To meet the emission limitations in Tables 1 and 2 to this subpart, you must use one or more of the options listed in paragraphs (a)(1) and (2) of this section.

(1) Emissions control system. Use an emissions capture and collection system and an air pollution control device (APCD) and demonstrate that the resulting emissions meet the emission limits in Table 1 to this subpart, and that the capture and collection system and APCD meet the applicable operating limits in Table 2 to this subpart.

(2) Process changes. Use low-HAP raw materials or implement manufacturing process changes and demonstrate that the resulting emissions or emissions reductions meet the emission limits in Table 1 to this subpart.

(b) To meet the work practice standards for affected periodic kilns, you must comply with the requirements listed in Table 3 to this subpart.

(c) To meet the work practice standards for dioxins/furans for affected tunnel kilns, you must comply with the requirements listed in Table 3 to this subpart.

(d) To meet the work practice standards for affected tunnel kilns during periods of startup and shutdown, you must comply with the requirements listed in Table 3 to this subpart.
GENERAL COMPLIANCE REQUIREMENTS

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

(a) You must be in compliance with the emission limitations (including operating limits) in this subpart at all times, except during periods that you are approved for and in compliance with the alternative standard for routine control device maintenance as specified in paragraph (d) of this section, and except during periods of start-up and shutdown, at which time you must comply with the applicable work practice standard specified in Table 3 to this subpart.

(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 the applicable standard have been achieved. Determination of whether a source is operating in compliance with operation and maintenance requirements 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. During the period between the compliance date specified for your affected source in § 63.8395 and the date upon which continuous monitoring systems (CMS) (e.g., continuous parameter monitoring systems) have been installed and verified and any applicable operating limits have been set, you must maintain a log detailing the operation and maintenance of the process and emissions control equipment.

(c) For each affected kiln that is subject to the emission limits specified in Table 1 to this subpart and must perform routine maintenance on the control device for that kiln, you may bypass the kiln control device and continue operating the kiln subject to the alternative standard established in this paragraph upon approval by the Administrator and provided you satisfy the conditions listed in paragraphs (d)(1) through (5) of this section.

(1) You must request to use the routine control device maintenance alternative standard from the Administrator no later than 120 calendar days before the compliance date specified in § 63.8395. Your request must justify the need for the routine maintenance on the control device and the time required to accomplish the maintenance activities, describe the maintenance activities and the frequency of the maintenance activities, explain why the maintenance cannot be accomplished during kiln shutdowns, provide information stating whether the continued operation of the affected source will result in fewer emissions than shutting the source down while the maintenance is performed, describe how you plan to comply with paragraph (b) of this section during the maintenance, and provide any other documentation required by the Administrator.

(2) The routine control device maintenance must not exceed 4 percent of the annual operating uptime for each kiln.

(3) The request for the routine control device maintenance alternative standard, if approved by the Administrator, must be incorporated by reference in and attached to the affected source’s title V permit.

(4) You must minimize HAP emissions during the period when the kiln is operating and the control device is offline by complying with the applicable standard in Table 3 to this subpart.

(5) You must minimize the time period during which the kiln is operating and the control device is offline.

(e) You must be in compliance with the work practice standards in this subpart at all times.

(f) You must be in compliance with the provisions of subpart A of this part,
§ 63.8425 What do I need to know about operation, maintenance, and monitoring plans?

(a) For each affected kiln that is subject to the emission limits specified in Table 1 to this subpart, you must prepare, implement, and revise as necessary an OM&M plan that includes the information in paragraph (b) of this section. Your OM&M plan must be available for inspection by the delegated authority upon request.

(b) Your OM&M plan must include, as a minimum, the information in paragraphs (b)(1) through (13) of this section.

1. Each process and APCD to be monitored, the type of monitoring device that will be used, and the operating parameters that will be monitored.

2. A monitoring schedule that specifies the frequency that the parameter values will be determined and recorded.

3. The limits for each parameter that represent continuous compliance with the emission limitations in §63.8405. The limits must be based on values of the monitored parameters recorded during performance tests.

4. Procedures for the proper operation and routine and long-term maintenance of each APCD, including a maintenance and inspection schedule that is consistent with the manufacturer’s recommendations.

5. Procedures for installing the CMS sampling probe or other interface at a measurement location relative to each affected process unit such that the measurement is representative of control of the exhaust emissions (e.g., on or downstream of the last APCD).

6. Performance and equipment specifications for the sample interface, the pollutant concentration or parametric signal analyzer, and the data collection and reduction system.

7. Continuous monitoring system performance evaluation procedures and acceptance criteria (e.g., calibrations).

8. Procedures for the proper operation and maintenance of monitoring equipment consistent with the requirements in §§63.8450 and 63.8(c)(1), (3), (7), and (8).

9. Continuous monitoring system data quality assurance procedures consistent with the requirements in §63.8(d)(1) and (2). The owner or operator shall keep these written procedures on record for the life of the affected source or until the affected source is no longer subject to the provisions of this part, to be made available for inspection, upon request, by the Administrator. If the performance evaluation plan in §63.8(d)(2) is revised, the owner or operator shall keep previous (i.e., superseded) versions of the performance evaluation plan on record to be made available for inspection, upon request, by the Administrator, for a period of 5 years after each revision to the plan. The program of corrective action should be included in the plan required under §63.8(d)(2).

10. Continuous monitoring system recordkeeping and reporting procedures consistent with the requirements in §§63.8485 and 63.8490.

11. Procedures for responding to operating parameter deviations, including the procedures in paragraphs (b)(11)(i) through (iii) of this section.

(i) Procedures for determining the cause of the operating parameter deviation.

(ii) Actions necessary for correcting the deviation and returning the operating parameters to the allowable limits.

(iii) Procedures for recording the times that the deviation began and ended and corrective actions were initiated and completed.


13. If you operate an affected kiln and you plan to take the kiln control device out of service for routine maintenance, as specified in §63.8420(d), the procedures specified in paragraphs (b)(13)(i) and (ii) of this section.

(i) Procedures for minimizing HAP emissions from the kiln during periods of routine maintenance of the kiln control device when the kiln is operating and the control device is offline.

(ii) Procedures for minimizing the duration of any period of routine maintenance on the kiln control device when the kiln is operating and the control device is offline.
Environmental Protection Agency

§ 63.8445 Changes to the operating limits in your OM&M plan require a new performance test. If you are revising an operating limit parameter value, you must meet the requirements in paragraphs (c)(1) and (2) of this section.

(1) Submit a notification of performance test to the Administrator as specified in §63.7(b).

(2) After completing the performance tests to demonstrate that compliance with the emission limits can be achieved at the revised operating limit parameter value, you must submit the performance test results and the revised operating limits as part of the Notification of Compliance Status required under §63.9(h).

(d) If you are revising the inspection and maintenance procedures in your OM&M plan, you do not need to conduct a new performance test.

TESTING AND INITIAL COMPLIANCE REQUIREMENTS

§ 63.8435 By what date must I conduct performance tests?

For each affected kiln that is subject to the emission limits specified in Table 1 to this subpart, you must conduct performance tests within 180 calendar days after the compliance date that is specified for your source in §63.8395 and according to the provisions in §63.7(a)(2).

§ 63.8440 When must I conduct subsequent performance tests?

(a) For each affected kiln that is subject to the emission limits specified in Table 1 to this subpart, you must conduct a performance test before renewing your 40 CFR part 70 operating permit or at least every 5 years following the initial performance test.

(b) You must conduct a performance test when you want to change the parameter value for any operating limit specified in your OM&M plan.

§ 63.8445 How do I conduct performance tests and establish operating limits?

(a) You must conduct each performance test in Table 4 to this subpart that applies to you.

(b) Before conducting the performance test, you must install and calibrate all monitoring equipment.

(c) Each performance test must be conducted according to the requirements in §63.7 and under the specific conditions in Table 4 to this subpart.

(d) Performance tests shall be conducted under such conditions as the Administrator specifies to you based on representative performance of the affected source for the period being tested. Representative conditions exclude periods of startup and shutdown. You may not conduct performance tests during periods of malfunction. You must record the process information that is necessary to document operating conditions during the test and include in such record an explanation to support that such conditions represent normal operation. Upon request, you shall make available to the Administrator such records as may be necessary to determine the conditions of performance tests.

(e) You must conduct at least 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.

(f) You must use the data gathered during the performance test and the equations in paragraphs (f)(1) and (2) of this section to determine compliance with the emission limitations.

(1) To determine compliance with the production-based particulate matter (PM) and mercury (Hg) emission limits in Table 1 to this subpart, you must calculate your mass emissions per unit of production for each test run using Equation 1:

\[ MP = \frac{ER}{P} \]  

(Eq. 1)
Where:  
\( MP = \) mass per unit of production, kilograms (pounds) of pollutant per megagram (ton) of fired product  
\( ER = \) mass emission rate of pollutant (PM or \( Hg \)) during each performance test run, kilograms (pounds) per hour  
\( P = \) production rate during each performance test run, megagrams (tons) of fired product per hour.  

(2) To determine compliance with the health-based standard for acid gas HAP for BSCP manufacturing facilities in Table 1 to this subpart, you must:  
(i) Calculate the HCl-equivalent emissions for HF, HCl, and \( Cl_2 \) for each tunnel kiln at your facility using Equation 2:

\[
E_i = E_{HCl} + \left[ E_{HF} \left( \frac{RfC_{HCl}}{RfC_{HF}} \right) \right] + \left[ E_{Cl2} \left( \frac{RfC_{HCl}}{RfC_{Cl2}} \right) \right] \quad (Eq. 2)
\]

Where:  
\( E_i = \) HCl-equivalent emissions for kiln \( i \), kilograms (pounds) per hour  
\( E_{HCl} = \) emissions of HCl, kilograms (pounds) per hour  
\( E_{HF} = \) emissions of HF, kilograms (pounds) per hour  
\( E_{Cl2} = \) emissions of \( Cl_2 \), kilograms (pounds) per hour  
\( RfC_{HCl} = \) reference concentration for HCl, 20 micrograms per cubic meter  
\( RfC_{HF} = \) reference concentration for HF, 14 micrograms per cubic meter  
\( RfC_{Cl2} = \) reference concentration for \( Cl_2 \), 0.15 micrograms per cubic meter  

(ii) If you have multiple tunnel kilns at your facility, sum the HCl-equivalent values for all tunnel kilns at the facility using Equation 3:

\[
E_{total} = \sum_{i=1}^{n} E_i \quad (Eq. 3)
\]

Where:  
\( E_{total} = \) HCl-equivalent emissions for total of all kilns at facility, kilograms (pounds) per hour  
\( E_i = \) HCl-equivalent emissions for kiln \( i \), kilograms (pounds) per hour  
\( n = \) number of tunnel kilns at facility  

(iii) Compare this value to the health-based standard in Table 1 to this subpart.  

(g) You must establish each site-specific operating limit in Table 2 to this subpart that applies to you as specified in paragraph (g)(1) of this section and in Table 4 to this subpart.  
(1)(i) If you do not have an APCD installed on your kiln, calculate the maximum potential HCl-equivalent emissions for HF, HCl, and \( Cl_2 \) for each tunnel kiln at your facility using Equation 4:

\[
E_{max} = \left( Cap \right) \left( MP_{HCl} \left( \frac{RfC_{HCl}}{RfC_{HF}} \right) \right) \quad (Eq. 4)
\]

Where:  
\( E_{max} = \) maximum potential HCl-equivalent emissions for kiln \( i \), kilograms (pounds) per hour  
\( Cap = \) design capacity for kiln \( i \), megagrams (tons) of fired product per hour  
\( MP_{HCl} = \) mass of HCl per unit of production for kiln \( i \), kilograms (pounds) of HCl per megagram (ton) of fired product
Environmental Protection Agency

§ 63.8445

\( MP_i^{HF} = \text{mass of HF per unit of production for kiln } i, \text{ kilograms (pounds) of HF per megagram (ton) of fired product} \)

\( MP_i^{Cl_2} = \text{mass of Cl}_2 \text{ per unit of production for kiln } i, \text{ kilograms (pounds) of Cl}_2 \text{ per megagram (ton) of fired product} \)

\( RfC_{HCl} = \text{reference concentration for HCl, } 20 \text{ micrograms per cubic meter} \)

\( RfC_{HF} = \text{reference concentration for HF, } 14 \text{ micrograms per cubic meter} \)

\( RfC_{Cl_2} = \text{reference concentration for Cl}_2, 0.15 \text{ micrograms per cubic meter} \)

(ii) If you have multiple tunnel kilns at your facility, sum the maximum potential HCl-equivalent values for all tunnel kilns at the facility using Equation 5:

\[
E_{\text{max total}} = \sum_{j=1}^{n} E_{\text{max } j}
\]

Where:

\( E_{\text{max total}} = \text{maximum potential HCl-equivalent emissions for total of all kilns at facility, kilograms (pounds) per hour} \)

\( E_{\text{max } j} = \text{maximum potential HCl-equivalent emissions for kiln } i, \text{ kilograms (pounds) per hour} \)

\( n = \text{number of tunnel kilns at facility} \)

(iii) If you have a single tunnel kiln at your facility and the total facility maximum potential HCl-equivalent emissions (\( E_{\text{max total}} \)) are greater than the HCl-equivalent limit in Table 1 to this subpart, determine the maximum process rate for the tunnel kiln using Equation 6 that would ensure the total facility maximum potential HCl-equivalent emissions remain at or below the HCl-equivalent limit. The maximum process rate would become your operating limit for process rate and must be included in your OM&M plan.

\[
P_{\text{max } i} = \frac{HCl\text{-eq}}{\left( MP_i^{HCl} + \left( MP_i^{HF} \cdot \frac{RfC_{HCl}^{HF}}{RfC_{HF}^{HF}} \right) + \left( MP_i^{Cl_2} \cdot \frac{RfC_{Cl_2}^{HCl}}{RfC_{Cl_2}^{Cl_2}} \right) \right)}
\]

Where:

\( P_{\text{max } i} = \text{maximum process rate for kiln } i, \text{ megagrams (tons) per hour} \)

\( HCl\text{-eq} = \text{HCl-equivalent limit in Table 1 to this subpart, kilograms (pounds) per hour} \)

\( MP_i^{HCl} = \text{mass of HCl per unit of production for kiln } i, \text{ kilograms (pounds) of HCl per megagram (ton) of fired product} \)

\( MP_i^{HF} = \text{mass of HF per unit of production for kiln } i, \text{ kilograms (pounds) of HF per megagram (ton) of fired product} \)

\( MP_i^{Cl_2} = \text{mass of Cl}_2 \text{ per unit of production for kiln } i, \text{ kilograms (pounds) of Cl}_2 \text{ per megagram (ton) of fired product} \)

\( RfC_{HCl} = \text{reference concentration for HCl, } 20 \text{ micrograms per cubic meter} \)

\( RfC_{HF} = \text{reference concentration for HF, } 14 \text{ micrograms per cubic meter} \)

\( RfC_{Cl_2} = \text{reference concentration for Cl}_2, 0.15 \text{ micrograms per cubic meter} \)

(iv) If you have multiple tunnel kilns at your facility and the total facility maximum potential HCl-equivalent emissions (\( E_{\text{max total}} \)) are greater than the HCl-equivalent limit in Table 1 to this subpart, determine the combination of maximum process rates that would ensure that total facility maximum potential HCl-equivalent emissions remain at or below the HCl-equivalent limit. The maximum process rates would become your operating limits for process rate and must be included in your OM&M plan.

(2) [Reserved]

(h) For each affected kiln that is subject to the emission limits specified in Table 1 to this subpart and is equipped with an APCD that is not addressed in Table 2 to this subpart or that is using process changes as a means of meeting the emission limits in Table 1 to this
§ 63.8450 What are my monitoring installation, operation, and maintenance requirements?

(a) You must install, operate, and maintain each CMS according to your OM&M plan and the requirements in paragraphs (a)(1) through (5) of this section.

(1) Conduct a performance evaluation of each CMS according to your OM&M plan.

(2) The CMS must complete a minimum of one cycle of operation for each successive 15-minute period. To have a valid hour of data, you must have at least three of four equally spaced data values (or at least 75 percent if you collect more than four data values per hour) for that hour (not including startup, shutdown, malfunction, out-of-control periods, or periods of routine control device maintenance covered by the routine control device maintenance alternative standard as specified in §63.8420(d)).

(3) Determine and record the 3-hour block averages of all recorded readings, calculated after every 3 hours of operation as the average of the previous 3 operating hours. To calculate the average for each 3-hour average period, you must have at least 75 percent of the recorded readings for that period (not including startup, shutdown, malfunction, out-of-control periods, or periods of routine control device maintenance covered by the routine control device maintenance alternative standard as specified in §63.8420(d)).

(4) Record the results of each inspection, calibration, and validation check.

(5) At all times, maintain the monitoring equipment including, but not limited to, maintaining necessary parts for routine repairs of the monitoring equipment.

(b) For each liquid flow measurement device, you must meet the requirements in paragraphs (a)(1) through (5) and paragraphs (b)(1) through (3) of this section.

(1) Locate the flow sensor in a position that provides a representative flowrate.

(2) Use a flow sensor with a minimum measurement sensitivity of 2 percent of the liquid flowrate.

(c) For each pressure measurement device, you must meet the requirements in paragraphs (a)(1) through (5) and paragraphs (c)(1) through (7) of this section.

(1) Locate the pressure sensor(s) in or as close to a position that provides a representative measurement of the pressure.

(2) Minimize or eliminate pulsating pressure, vibration, and internal and external corrosion.

(3) Use a gauge with a minimum measurement sensitivity of 0.5 inch of water or a transducer with a minimum measurement sensitivity of 1 percent of the pressure range.

(4) Check the pressure tap daily to ensure that it is not plugged.

(5) Using a manometer, check gauge calibration quarterly and transducer calibration monthly.

(6) Any time the sensor exceeds the manufacturer’s specified maximum operating pressure range, conduct calibration checks or install a new pressure sensor.

(7) At least monthly, inspect all components for integrity, all electrical connections for continuity, and all mechanical connections for leakage.
(d) For each pH measurement device, you must meet the requirements in paragraphs (a)(1) through (5) and paragraphs (d)(1) through (4) of this section.

(1) Locate the pH sensor in a position that provides a representative measurement of pH.

(2) Ensure the sample is properly mixed and representative of the fluid to be measured.

(3) Check the pH meter’s calibration at one point daily.

(4) At least monthly, inspect all components for integrity and all electrical connections for continuity.

(e) For each bag leak detection system, you must meet the requirements in paragraphs (e)(1) through (11) of this section.

(1) Each triboelectric bag leak detection system must be installed, calibrated, operated, and maintained according to EPA–454/R–98–015, “Fabric Filter Bag Leak Detection Guidance,” (incorporated by reference, see §63.14). Other types of bag leak detection systems must be installed, operated, calibrated, and maintained in a manner consistent with the manufacturer’s written specifications and recommendations.

(2) The bag leak detection system must be certified by the manufacturer to be capable of detecting PM emissions at concentrations of 10 milligrams per actual cubic meter (0.0044 grains per actual cubic foot) or less.

(3) The bag leak detection system sensor must provide an output of relative PM loadings.

(4) The bag leak detection system must be equipped with a device to continuously record the output signal from the sensor.

(5) The bag leak detection system must be equipped with an audible alarm system that will sound automatically when an increase in relative PM emissions over a preset level is detected. The alarm must be located where it is easily heard by plant operating personnel.

(6) For positive pressure fabric filter systems, a bag leak detector must be installed in each baghouse compartment or cell.

(7) For negative pressure or induced air fabric filters, the bag leak detector must be installed downstream of the fabric filter.

(8) Where multiple detectors are required, the system’s instrumentation and alarm may be shared among detectors.

(9) The baseline output must be established by adjusting the range and the averaging period of the device and establishing the alarm set points and the alarm delay time according to section 5.0 of the EPA–454/R–98–015, “Fabric Filter Bag Leak Detection Guidance,” (incorporated by reference, see §63.14).

(f) For each lime, chemical, or carbon feed rate measurement device, you must meet the requirements in paragraphs (a)(1) through (5) and paragraphs (f)(1) and (2) of this section.

(g) For each limestone feed system on a dry limestone adsorber (DLA), you must meet the requirements in paragraphs (a)(1), (4), and (5) of this section and must ensure on a monthly basis that the feed system replaces limestone at least as frequently as the schedule set during the performance test.

(h) For each temperature measurement device, you must meet the requirements in paragraphs (a)(1) through (5) and paragraphs (h)(1) through (3) of this section.
§ 63.8455 How do I demonstrate initial compliance with the emission limitations and work practice standards?

(a) You must demonstrate initial compliance with each emission limitation and work practice standard that applies to you according to Table 5 to this subpart.

(b) You must establish each site-specific operating limit in Table 2 to this subpart that applies to you according to the requirements in §63.8445 and Table 4 to this subpart.

(c) You must submit the Notification of Compliance Status containing the results of the initial compliance demonstration according to the requirements in §63.8480(c).

CONTINUOUS COMPLIANCE REQUIREMENTS

§ 63.8465 How do I monitor and collect data to demonstrate continuous compliance?

(a) You must monitor and collect data according to this section.

(b) Except for periods of 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 (or collect data at all required intervals) at all times that the affected source is operating. This includes periods of startup, shutdown, malfunction, and routine control device maintenance as specified in §63.8420(d) when the affected source is operating.

(c) You may not use data recorded during monitoring malfunctions, associated repairs, out-of-control periods, or required quality assurance or control activities for purposes of calculating data averages. You must use all the valid data collected during all other periods in assessing compliance. Any averaging period for which you do not have valid monitoring data and such data are required constitutes a deviation from the monitoring requirements.

§ 63.8470 How do I demonstrate continuous compliance with the emission limitations and work practice standards?

(a) You must demonstrate continuous compliance with each emission limit, operating limit, and work practice standard in Tables 1, 2, and 3 to this subpart that applies to you according to the methods specified in Table 6 to this subpart.

(b) For each affected kiln that is subject to the emission limits specified in Table 1 to this subpart and is equipped with an APCD that is not addressed in Table 2 to this subpart, or that is using process changes as a means of meeting the emission limits in Table 1 to this subpart, you must demonstrate continuous compliance with each emission limit in Table 1 to this subpart, and each operating limit established as required in §63.8445(h)(2) according to the methods specified in your approved alternative monitoring procedures request, as described in §§63.8445(h)(1) and 63.8(f).

(c) You must report each instance in which you did not meet each emission limit and each operating limit in this subpart that applies to you. These instances are deviations from the emission limitations in this subpart. These deviations must be reported according to the requirements in §63.8485(c)(9).

(d) [Reserved]

(e)(1) VE testing. You must demonstrate continuous compliance with the emission limits in Table 2 to this subpart for visible emissions (VE) from tunnel kilns that are uncontrolled or equipped with DLA, dry lime injection fabric filter (DIFF), dry lime scrubber/fabric filter (DLS/FF), or other dry control device by monitoring VE at each kiln stack according to the requirements in paragraphs (e)(1)(i) through (v) of this section.

(i) Perform daily VE observations of each kiln stack according to the procedures of Method 22 of 40 CFR part 60, appendix A-7. You must conduct the
Method 22 test while the affected source is operating under normal conditions. The duration of each Method 22 test must be at least 15 minutes.

(ii) If VE are observed during any daily test conducted using Method 22 of 40 CFR part 60, appendix A–7, you must promptly conduct an opacity test, according to the procedures of Method 9 of 40 CFR part 60, appendix A–4. If opacity greater than 10 percent is observed, you must initiate and complete corrective actions according to your OM&M plan.

(iii) You may decrease the frequency of Method 22 testing from daily to weekly for a kiln stack if one of the conditions in paragraph (e)(1)(iii)(A) or (B) of this section is met.

(A) No VE are observed in 30 consecutive daily Method 22 tests for any kiln stack; or

(B) No opacity greater than 10 percent is observed during any of the Method 9 tests for any kiln stack.

(iv) If VE are observed during any weekly test and opacity greater than 10 percent is observed in the subsequent Method 9 test, you must promptly initiate and complete corrective actions according to your OM&M plan, resume testing of that kiln stack following Method 22 of 40 CFR part 60, appendix A–7, on a daily basis, as described in paragraph (e)(1)(i) of this section, and maintain that schedule until one of the conditions in paragraph (e)(1)(iii)(A) or (B) of this section is met, at which time you may again decrease the frequency of Method 22 testing to a weekly basis.

(v) If greater than 10 percent opacity is observed during any test conducted using Method 9 of 40 CFR part 60, appendix A–4, you must report these deviations by following the requirements in §63.8485.

(2) Alternative to VE testing. In lieu of meeting the requirements under paragraph (e)(1) of this section, you may conduct a PM test at least once every year following the initial performance test, according to the procedures of Method 5 of 40 CFR part 60, appendix A–3, and the provisions of §63.8445(e) and (f)(1).
(2) The first compliance report must be postmarked or delivered no later than July 31 or January 31 for compliance periods ending on June 30 and December 31, respectively.

(3) 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) Each subsequent compliance report must be postmarked or delivered no later than July 31 or January 31 for compliance periods ending on June 30 and December 31, respectively.

(5) For each affected source that is subject to permitting regulations pursuant to 40 CFR part 70 or 40 CFR part 71, 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 the dates in paragraphs (b)(1) through (4) of this section.

(c) The compliance report must contain the information in paragraphs (c)(1) through (8) of this section.

(1) Company name and address.

(2) Statement by a responsible official with that official’s name, title, and signature, certifying that, based on information and belief formed after reasonable inquiry, the statements and information in the report are true, accurate, and complete.

(3) Date of report and beginning and ending dates of the reporting period.

(4) A description of control device maintenance performed while the control device was offline and the kiln controlled by the control device was operating, including the information specified in paragraphs (c)(4)(i) through (iii) of this section.

(i) The date and time when the control device was shut down and restarted.

(ii) Identification of the kiln that was operating and the number of hours that the kiln operated while the control device was offline.

(iii) A statement of whether or not the control device maintenance was included in your approved routine control device maintenance request developed as specified in §63.8420(d). If the control device maintenance was included in your approved routine control device maintenance request, then you must report the information in paragraphs (c)(4)(ii)(A) through (C) of this section.

(A) The total amount of time that the kiln controlled by the control device operated during the current semiannual compliance period and during the previous semiannual compliance period.

(B) The amount of time that each kiln controlled by the control device operated while the control device was offline for maintenance covered under the routine control device maintenance alternative standard during the current semiannual compliance period and during the previous semiannual compliance period.

(C) Based on the information recorded under paragraphs (c)(4)(ii)(A) and (B) of this section, compute the annual percent of kiln operating uptime during which the control device was offline for routine maintenance using Equation 7.

\[
RM = \frac{DT_p + DT_c}{KU_p + KU_c} \times 100
\]

(Eq. 7)

Where:

\[
RM = \text{Annual percentage of kiln uptime during which control device was offline for routine control device maintenance}
\]

\[
DT_p = \text{Control device downtime claimed under the routine control device maintenance alternative standard for the previous semiannual compliance period}
\]

\[
DT_c = \text{Control device downtime claimed under the routine control device maintenance alternative standard for the current semiannual compliance period}
\]
Environmental Protection Agency

§ 63.8485

KU_p = Kiln uptime for the previous semi-annual compliance period
KU_c = Kiln uptime for the current semi-annual compliance period

(5) A report of the most recent burner tune-up conducted to comply with the dioxin/furan work practice standard in Table 3 to this subpart.

(6) If there are no deviations from any emission limitations (emission limits or operating limits) that apply to you, the compliance report must contain a statement that there were no deviations from the emission limitations during the reporting period.

(7) If there were no periods during which the CMS was out-of-control as specified in your OM&M plan, the compliance report must contain a statement that there were no periods during which the CMS was out-of-control during the reporting period.

(8) The first compliance report must contain the startup push rate for each kiln, the minimum APCD inlet temperature for each APCD, and the temperature profile for each kiln without an APCD.

(9) For each deviation that occurs at an affected source, report such events in the compliance report by including the information in paragraphs (c)(9)(i) through (iii) of this section.

(i) The date, time, and duration of the deviation.

(ii) A list of the affected sources or equipment for which the deviation occurred.

(iii) An estimate of the quantity of each regulated pollutant emitted over any emission limit, and a description of the method used to estimate the emissions.

(d) For each deviation from an emission limitation (emission limit or operating limit) occurring at an affected source where you are using a CMS to comply with the emission limitations in this subpart, you must include the information in paragraphs (c)(1) through (4) and (c)(9), and paragraphs (d)(1) through (11) of this section. This includes periods of startup, shutdown, and routine control device maintenance.

(1) The total operating time of each affected source during the reporting period.

(2) The date and time 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 pertinent information in your OM&M plan.

(4) Whether each deviation occurred during routine control device maintenance covered in your approved routine control device maintenance alternative standard or during another period, and the cause of each deviation (including unknown cause, if applicable).

(5) A description of any corrective action taken to return the affected unit to its normal or usual manner of operation.

(6) A breakdown of the total duration of the deviations during the reporting period into those that were due to startup, shutdown, 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 source operating time during that reporting period.

(8) A brief description of the process units.

(9) A brief description of the CMS.

(10) The date of the latest CMS certification or audit.

(11) A description of any changes in CMS, processes, or control equipment since the last reporting period.

(e) If you have obtained a title V operating permit according to 40 CFR part 70 or 40 CFR part 71, you 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 you submit a compliance report according to Table 9 to 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 limitation (including any operating limit), then submitting the compliance report will satisfy any obligation to report the same deviations in the semiannual monitoring report.
However, submitting a compliance report will not otherwise affect any obligation you may have to report deviations from permit requirements to the permitting authority.

(f) Within 60 calendar days after the date of completing each performance test (as defined in §63.2) required by this subpart, you must submit the results of the performance test following the procedure specified in either paragraph (f)(1) or (f)(2) of this section.

(1) For data collected using test methods supported by the EPA’s Electronic Reporting Tool (ERT) as listed on the EPA’s ERT Web site (http://www.epa.gov/ttn/chief/ert/index.html) at the time of the test, you must submit the results of the performance test to the EPA via the Compliance and Emissions Data Reporting Interface (CEDRI). (CEDRI can be accessed through the EPA’s Central Data Exchange (CDX) (http://cdx.epa.gov/).) Performance test data must be submitted in a file format generated through the use of the EPA’s ERT or an alternate electronic file format consistent with the extensible markup language (XML) schema listed on the EPA’s ERT Web site. If you claim that some of the performance test information being submitted is confidential business information (CBI), you must submit a complete file generated through the use of the EPA’s ERT or an alternate electronic file consistent with the XML schema listed on the EPA’s ERT Web site, including information claimed to be CBI, on a compact disc, flash drive, or other commonly used electronic storage media to the EPA. The electronic media must be clearly marked as CBI and mailed to U.S. EPA/OAPQS/CORE CBI Office, Attention: Group Leader, Measurement Policy Group, MD C404-02, 4390 Old Page Rd., Durham, NC 27703. The same ERT or alternate file with the CBI omitted must be submitted to the EPA via the EPA’s CDX as described earlier in this paragraph.

(2) For data collected using test methods that are not supported by the EPA’s ERT as listed on the EPA’s ERT Web site at the time of the test, you must submit the results of the performance test to the Administrator at the appropriate address listed in §63.13.

§63.8490 What records must I keep?

(a) You must keep the records listed in paragraphs (a)(1) through (3) 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 requirements in §63.10(b)(2)(iv).

(2) Records of performance tests as required in §63.10(b)(2)(v).

(3) Records relating to control device maintenance and documentation of your approved routine control device maintenance request, if you request to use the alternative standard under §63.8420(d).

(b) You must keep the records required in Table 6 to this subpart to show continuous compliance with each emission limitation and work practice standard that applies to you.

(c) You must also maintain the records listed in paragraphs (c)(1) through (11) of this section.

(1) For each bag leak detection system, records of each alarm, the time of the alarm, the time corrective action was initiated and completed, and a brief description of the cause of the alarm and the corrective action taken.

(2) For each deviation, record the information in paragraphs (c)(2)(i) through (iv) of this section.

(i) The date, time, and duration of the deviation.

(ii) A list of the affected sources or equipment.

(iii) An estimate of the quantity of each regulated pollutant emitted over any emission limit and a description of the method used to estimate the emissions.

(iv) Actions taken to minimize emissions in accordance with §63.8420(b) and any corrective actions taken to return the affected unit to its normal or usual manner of operation.

(3) For each affected source, records of production rates on a fired-product basis.

(4) Records for any approved alternative monitoring or test procedures.

(5) Records of maintenance and inspections performed on the APCD.
Environmental Protection Agency

§ 63.8510

(6) Current copies of your OM&M plan, including any revisions, with records documenting conformance.

(7) Logs of the information required in paragraphs (c)(7)(i) through (iii) of this section to document proper operation of your periodic kiln.

(i) Records of the firing time and temperature cycle for each product produced in each periodic kiln. If all periodic kilns use the same time and temperature cycles, one copy may be maintained for each kiln. Reference numbers must be assigned to use in log sheets.

(ii) For each periodic kiln, a log that details the type of product fired in each batch, the corresponding time and temperature protocol reference number, and an indication of whether the appropriate time and temperature cycle was fired.

(iii) For each periodic kiln, a log of the actual tonnage of product fired in the periodic kiln and an indication of whether the tonnage was below the maximum tonnage for that specific kiln.

(8) Logs of the maintenance procedures used to demonstrate compliance with the maintenance requirements of the periodic kiln work practice standards specified in Table 3 to this subpart.

(9) Records of burner tune-ups used to comply with the dioxin/furan work practice standard for tunnel kilns.

(10) For periods of startup and shutdown, records of the following information:

(i) The date, time, and duration of each startup and/or shutdown period, recording the periods when the affected source was subject to the standard applicable to startup and shutdown.

(ii) For periods of startup, the kiln push rate and kiln exhaust temperature prior to the time the kiln exhaust reaches the minimum APCD inlet temperature (for a kiln with an APCD) or the kiln temperature profile is attained (for a kiln with no APCD).

(iii) For periods of shutdown, the kiln push rate and kiln exhaust temperature after the time the kiln exhaust falls below the minimum APCD inlet temperature (for a kiln with an APCD) or the kiln temperature profile is no longer maintained (for a kiln with no APCD).

(11) All site-specific parameters, temperature profiles, and procedures required to be established or developed according to the applicable work practice standards in Table 3 to this subpart.

§ 63.8495 In what form and for 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 onsite for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to §63.10(b)(1). You may keep the records offsite for the remaining 3 years.

OTHER REQUIREMENTS AND INFORMATION

§ 63.8505 What parts of the General Provisions apply to me?

Table 10 to this subpart shows which parts of the General Provisions in §§63.1 through 63.16 apply to you.

§ 63.8510 Who implements and enforces this subpart?

(a) This subpart can be implemented and enforced by us, 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, in addition to 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 if implementation and enforcement of 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 subpart E of this part, the authorities contained in paragraph (c) of this section are retained by the Administrator.
§ 63.8515 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:

Air pollution control device (APCD) means any equipment that reduces the quantity of a pollutant that is emitted to the air.

Bag leak detection system means an instrument that is capable of monitoring PM loadings in the exhaust of a fabric filter in order to detect bag failures. A bag leak detection system includes, but is not limited to, an instrument that operates on triboelectric, light-scattering, light-transmittance, or other effects to monitor relative PM loadings.

Brick and structural clay products (BSCP) manufacturing facility means a plant site that manufactures brick (including, but not limited to, face brick, structural brick, and brick pavers); clay pipe; roof tile; extruded floor and wall tile; and/or other extruded, dimensional clay products. Brick and structural clay products manufacturing facilities typically process raw clay and shale, form the processed materials into bricks or shapes, and dry and fire the bricks or shapes. A plant site that manufactures refractory products, as defined in 40 CFR 63.9824, or clay ceramics, as defined in 40 CFR 63.8665, is not a BSCP manufacturing facility.

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 (including any operating limit) or work practice standard; or

(2) Fails to meet any term or condition that is adopted to implement an applicable requirement in this subpart for any affected source required to obtain such a permit.

Dry lime injection fabric filter (DIFF) means an APCD that includes continuous injection of hydrated lime or other sorbent into a duct or reaction chamber followed by a fabric filter.

Dry lime scrubber/fabric filter (DLS/FF) means an APCD that includes continuous injection of humidified hydrated lime or other sorbent into a reaction chamber followed by a fabric filter. These systems typically include recirculation of some of the sorbent.

Dry limestone adsorber (DLA) means an APCD that includes a limestone storage bin, a reaction chamber that is essentially a packed tower filled with limestone, and may or may not include a peeling drum that mechanically scrapes reacted limestone to regenerate the stone for reuse.

Emission limitation means any emission limit or operating limit.

Fabric filter means an APCD used to capture PM by filtering a gas stream through filter media; also known as a baghouse.

Initial startup means:

(1) For a new or reconstructed tunnel kiln controlled with a DLA, the time at which the temperature in the kiln first reaches 260 °C (500 °F) and the kiln contains product; or

(2) For a new or reconstructed tunnel kiln controlled with a DIFF, DLS/FF, or wet scrubber (WS), the time at which the kiln first reaches a level of production that is equal to 75 percent of the kiln design capacity or 12
Environmental Protection Agency

§ 63.8515

months after the affected source begins firing BSCP, whichever is earlier.

_Fired product_ means brick or structural clay products that have gone through the firing process via kilns.

_Kiln exhaust process stream_ means the portion of the exhaust from a tunnel kiln that exhausts directly to the atmosphere (or to an APCD), rather than to a sawdust dryer.

_Large tunnel kiln_ means a tunnel kiln (existing, new, or reconstructed) with a design capacity equal to or greater than 9.07 Mg/hr (10 tph) of fired product.

_Minimum APCD inlet temperature_ means the minimum temperature that kiln exhaust can be vented to the APCD that ensures the long-term integrity of the APCD.

_Particulate matter (PM)_ means, for purposes of this subpart, emissions of PM that serve as a measure of total particulate emissions, as measured by Method 5 (40 CFR part 60, appendix A–3) or Method 29 (40 CFR part 60, appendix A–8), and as a surrogate for non-mercury metal HAP contained in the particulates including, but not limited to, antimony, arsenic, beryllium, cadmium, chromium, cobalt, lead, manganese, nickel, and selenium.

_Periodic kiln_ means a batch firing kiln.

_Plant site_ means all contiguous or adjoining property that is under common control, including properties that are separated only by a road or other public right-of-way. Common control includes properties that are owned, leased, or operated by the same entity, parent entity, subsidiary, or any combination thereof.

_Responsible official_ means responsible official as defined in 40 CFR 70.2.

Small tunnel kiln means a tunnel kiln (existing, new, or reconstructed) with a design capacity less than 9.07 Mg/hr (10 tph) of fired product.

_Startup_ means the setting in operation of an affected source and starting the production process.

_Startup push rate_ means the kiln push rate required to bring the kiln to the proper operating temperature during startup.

_Tunnel kiln_ means any continuous kiln that is used to fire BSCP. Some tunnel kilns have two process streams, including a process stream that exhausts directly to the atmosphere or to an APCD, and a process stream in which the kiln exhaust is ducted to a sawdust dryer where it is used to dry sawdust before being emitted to the atmosphere.

_Tunnel kiln design capacity_ means the maximum amount of brick, in Mg (tons), that a kiln is designed to produce in one year divided by the number of hours in a year (8,760 hours), taking into account the void space in the brick, the push rate for the kiln, and the stacking pattern, if applicable. If a kiln is modified to increase the capacity, the design capacity is considered to be the capacity following modifications.

_Wet scrubber (WS)_ means an APCD that uses water, which may include caustic additives or other chemicals, as the sorbent. Wet scrubbers may use any of various design mechanisms to increase the contact between exhaust gases and the sorbent.

_Work practice standard_ means any design, equipment, work practice, operational standard, or combination thereof, that is promulgated pursuant to section 112(h) of the Clean Air Act.

Tables to Subpart JJJJJ of Part 69
TABLE 1 TO SUBPART JJJJJ OF PART 63—EMISSION LIMITS

As stated in §63.8405, you must meet each emission limit in the following table that applies to you:

<table>
<thead>
<tr>
<th>For each . . .</th>
<th>You must meet the following emission limits . . .</th>
<th>Or you must comply with the following . . .</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Collection of all tunnel kilns at facility, including all process streams.</td>
<td>HF, HCl, and Cl₂ emissions must not exceed 26 kg/hr (57 lb/hr) HCl equivalent, under the health-based standard, as determined using Equations 2 and 3.</td>
<td>i. PM emissions must not exceed 6.6 mg/dscm (0.0029 gr/dscf) at 17% O₂; or ii. Non-Hg HAP metals emissions must not exceed 0.0026 kg/hr (0.0057 lb/hr).</td>
</tr>
<tr>
<td>2. Existing large tunnel kiln (design capacity ≥10 tons per hour (tp/h) of fired product), including all process streams.</td>
<td>a. PM emissions must not exceed 0.018 kg/Mg (0.036 lb/ton) of fired product.</td>
<td>i. PM emissions must not exceed 0.018 kg/Mg (0.036 lb/ton) of fired product.</td>
</tr>
<tr>
<td></td>
<td>b. Hg emissions must not exceed 2.1 E–05 kilogram per megagram (kg/Mg) (4.1 E–05 pound per ton (lb/ton)) of fired product.</td>
<td>i. Hg emissions must not exceed 7.7 micrograms per dry standard cubic meter (μg/dscm) at 17% O₂; or ii. Hg emissions must not exceed 2.5 E–04 kg/hr (5.5 E–04 lb/hr).</td>
</tr>
<tr>
<td>3. Existing small tunnel kiln (design capacity &lt;10 tph of fired product), including all process streams.</td>
<td>a. PM emissions must not exceed 0.19 kg/Mg (0.37 lb/ton) of fired product.</td>
<td>i. PM emissions must not exceed 0.19 kg/Mg (0.37 lb/ton) of fired product.</td>
</tr>
<tr>
<td></td>
<td>b. Hg emissions must not exceed 1.7 E–04 kg/Mg (3.3 E–04 lb/ton) of fired product.</td>
<td>i. Hg emissions must not exceed 91 μg/dscm at 17% O₂; or ii. Hg emissions must not exceed 8.5 E–04 kg/hr (0.0019 lb/hr).</td>
</tr>
<tr>
<td>4. New or reconstructed large tunnel kiln (design capacity ≥10 tph of fired product), including all process streams.</td>
<td>a. PM emissions must not exceed 0.0089 kg/Mg (0.018 lb/ton) of fired product.</td>
<td>i. PM emissions must not exceed 0.0089 kg/Mg (0.018 lb/ton) of fired product.</td>
</tr>
<tr>
<td></td>
<td>b. Hg emissions must not exceed 1.4 E–05 kg/Mg (2.8 E–05 lb/ton) of fired product.</td>
<td>i. Hg emissions must not exceed 6.2 mg/dscm (0.0014 gr/dscf) at 17% O₂; or ii. Hg emissions must not exceed 1.6 E–04 kg/hr (3.4 E–04 lb/hr).</td>
</tr>
<tr>
<td>5. New or reconstructed small tunnel kiln (design capacity &lt;10 tph of fired product), including all process streams.</td>
<td>a. PM emissions must not exceed 0.015 kg/Mg (0.030 lb/ton) of fired product.</td>
<td>i. PM emissions must not exceed 0.015 kg/Mg (0.030 lb/ton) of fired product.</td>
</tr>
<tr>
<td></td>
<td>b. Hg emissions must not exceed 1.7 E–04 kg/Mg (3.3 E–04 lb/ton) of fired product.</td>
<td>i. Hg emissions must not exceed 91 μg/dscm at 17% O₂; or ii. Hg emissions must not exceed 8.5 E–04 kg/hr (0.0019 lb/hr).</td>
</tr>
</tbody>
</table>

TABLE 2 TO SUBPART JJJJJ OF PART 63—OPERATING LIMITS

As stated in §63.8405, you must meet each operating limit in the following table that applies to you:

<table>
<thead>
<tr>
<th>For each . . .</th>
<th>You must . . .</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Tunnel kiln equipped with a DLA</td>
<td>a. Maintain the average pressure drop across the DLA for each 3-hour block period at or above the average pressure drop established during the HF/HCl/Cl₂ performance test; or, if you are monitoring the bypass stack damper position, initiate corrective action within 1 hour after the bypass damper is opened allowing the kiln exhaust gas to bypass the DLA and complete corrective action in accordance with your OM&amp;M plan; and b. Maintain an adequate amount of limestone in the limestone hopper, storage bin (located at the top of the DLA), and DLA at all times; maintain the limestone feeder setting (on a per ton of fired product basis) at or above the level established during the HF/HCl/Cl₂ performance test in which compliance was demonstrated; and</td>
</tr>
</tbody>
</table>
### Environmental Protection Agency

#### Pt. 63, Subpt. JJJJJ, Table 3

<table>
<thead>
<tr>
<th>For each . . .</th>
<th>You must . . .</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1. Existing, new or reconstructed periodic kiln.</strong></td>
<td>a. Minimize HAP emissions . . .</td>
</tr>
<tr>
<td></td>
<td>i. Develop and use a designed firing time and temperature cycle for each periodic kiln. You must either program the time and temperature cycle into your kiln or track each step on a log sheet; and</td>
</tr>
<tr>
<td></td>
<td>ii. Label each periodic kiln with the maximum load (in tons) of product that can be fired in the kiln during a single firing cycle; and</td>
</tr>
<tr>
<td></td>
<td>iii. For each firing load, document the total tonnage of product placed in the kiln to ensure that it is not greater than the maximum load identified in item 1b; and</td>
</tr>
<tr>
<td></td>
<td>iv. Develop and follow maintenance procedures for each kiln that, at a minimum, specify the frequency of inspection and maintenance of temperature monitoring devices, controls that regulate air-to-fuel ratios, and controls that regulate firing cycles; and</td>
</tr>
<tr>
<td></td>
<td>v. Develop and maintain records for each periodic kiln, as specified in §63.8490.</td>
</tr>
<tr>
<td></td>
<td>a. Minimize HAP emissions . . .</td>
</tr>
<tr>
<td><strong>2. Existing, new or reconstructed tunnel kiln.</strong></td>
<td>a. Minimize dioxin/furan emissions . . .</td>
</tr>
<tr>
<td></td>
<td>i. Maintain and inspect the burners and associated combustion controls (as applicable); and</td>
</tr>
<tr>
<td></td>
<td>ii. Tune the specific burner type to optimize combustion.</td>
</tr>
</tbody>
</table>

### Table 3 to Subpart JJJJJ of Part 63—Work Practice Standards

As stated in §63.8405, you must meet each work practice standard in the following table that applies to you:

<table>
<thead>
<tr>
<th>For each . . .</th>
<th>You must . . .</th>
<th>According to the following requirements . . .</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1. Existing, new or reconstructed periodic kiln.</strong></td>
<td>a. Minimize HAP emissions . . .</td>
<td>i. Develop and use a designed firing time and temperature cycle for each periodic kiln. You must either program the time and temperature cycle into your kiln or track each step on a log sheet; and</td>
</tr>
<tr>
<td></td>
<td></td>
<td>ii. Label each periodic kiln with the maximum load (in tons) of product that can be fired in the kiln during a single firing cycle; and</td>
</tr>
<tr>
<td></td>
<td></td>
<td>iii. For each firing load, document the total tonnage of product placed in the kiln to ensure that it is not greater than the maximum load identified in item 1b; and</td>
</tr>
<tr>
<td></td>
<td></td>
<td>iv. Develop and follow maintenance procedures for each kiln that, at a minimum, specify the frequency of inspection and maintenance of temperature monitoring devices, controls that regulate air-to-fuel ratios, and controls that regulate firing cycles; and</td>
</tr>
<tr>
<td></td>
<td></td>
<td>v. Develop and maintain records for each periodic kiln, as specified in §63.8490.</td>
</tr>
<tr>
<td><strong>2. Existing, new or reconstructed tunnel kiln.</strong></td>
<td>a. Minimize dioxin/furan emissions . . .</td>
<td>i. Maintain and inspect the burners and associated combustion controls (as applicable); and</td>
</tr>
<tr>
<td></td>
<td></td>
<td>ii. Tune the specific burner type to optimize combustion.</td>
</tr>
</tbody>
</table>
For each . . . You must . . . According to the following requirements . . .

3. Existing, new or reconstructed tunnel kiln during periods of startup.
   a. Minimize HAP emissions
   i. Establish the startup push rate for each kiln, the minimum APCD inlet temperature for each APCD, and temperature profile for each kiln without an APCD and include them in your first compliance report, as specified in § 63.8485(c)(8); and
   ii. After initial charging of the kiln with loaded kiln cars, remain at or below the startup push rate for the kiln until the kiln exhaust reaches the minimum APCD inlet temperature for a kiln with an APCD or until the kiln temperature profile is attained for a kiln with no APCD; and
   iii. If your kiln has an APCD, begin venting the exhaust from the kiln through the APCD by the time the kiln exhaust temperature reaches the minimum APCD inlet temperature.

4. Existing, new or reconstructed tunnel kiln during periods of shutdown.
   a. Minimize HAP emissions
   i. Do not push loaded kiln cars into the kiln once the kiln exhaust temperature falls below the minimum APCD inlet temperature if the kiln is controlled by an APCD or when the kiln temperature profile is no longer maintained for an uncontrolled kiln; and
   ii. If your kiln has an APCD, continue to vent the exhaust from the kiln through the APCD until the kiln exhaust temperature falls below the minimum inlet temperature for the APCD.

5. Existing, new or reconstructed tunnel kiln during periods of routine control device maintenance.
   a. Minimize HAP emissions
   i. Develop and use a temperature profile for each kiln; and
   ii. Develop and follow maintenance procedures for each kiln that, at a minimum, specify the frequency of inspection and maintenance of temperature monitoring devices and controls that regulate air-to-fuel ratios; and
   iii. Develop and maintain records for each kiln, as specified in § 63.8490(a)(3).

As stated in §63.8445, you must conduct each performance test in the following table that applies to you:

<table>
<thead>
<tr>
<th>Table 4 to Subpart JJJJJ of Part 63—Requirements for Performance Tests</th>
</tr>
</thead>
<tbody>
<tr>
<td>As stated in §63.8445, you must conduct each performance test in the following table that applies to you:</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>For each . . .</th>
<th>You must . . .</th>
<th>Using . . .</th>
<th>According to the following requirements . . .</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Tunnel kiln</td>
<td>a. Select locations of sampling ports and the number of traverse points. b. Determine velocities and volumetric flow rate.</td>
<td>Method 1 or 1A of 40 CFR part 60, appendix A–1. Method 2 of 40 CFR part 60, appendix A–1.</td>
<td>Sampling sites must be located at the outlet of the APCD and prior to any releases to the atmosphere for all affected sources. You may use Method 2A, 2C, 2D, or 2F of 40 CFR part 60, appendix A–1, or Method 2G of 40 CFR part 60, appendix A–2, as appropriate, as an alternative to using Method 2 of 40 CFR part 60, appendix A–1.</td>
</tr>
</tbody>
</table>
For each . . . | You must . . . | Using . . . | According to the following requirements . . .
---|---|---|---
c. Conduct gas molecular weight analysis. | Method 3 of 40 CFR part 60, appendix A–2. | You may use Method 3A or 3B of 40 CFR part 60, appendix A–2, as appropriate, as an alternative to using Method 3 of 40 CFR part 60, appendix A–2. ANSI/ASME PTC 19.10–1981 (incorporated by reference, see §63.14) may be used as an alternative to the manual procedures (but not the instrumental procedures) in Methods 3A and 3B.
d. Measure moisture content of the stack gas. | Method 4 of 40 CFR part 60, appendix A–3. | You may use Method 26 of 40 CFR part 60, appendix A–6, as an alternative to using Method 26A of 40 CFR part 60, appendix A–6, when no acid PM (e.g., HF or HCl dissolved in water droplets emitted by sources controlled by a WS) is present. ASTM D6735–01 (Reapproved 2009) (incorporated by reference, see §63.14) may be used as an alternative to Methods 26 and 26A.
e. Measure HF, HCl and Cl₂ emissions. |
   i. Method 26A of 40 CFR part 60, appendix A–8; or.
   ii. Method 320 of appendix A of this part. | When using Method 320 of appendix A of this part, you must follow the analyte spiking procedures of section 13 of Method 320 of appendix A of this part, unless you can demonstrate that the complete spiking procedure has been conducted at a similar source. ASTM D6348–03 (Reapproved 2010) (incorporated by reference, see §63.14) may be used as an alternative to Method 320 if the test plan preparation and implementation in Annexes A1–A8 are mandatory and the %R in Annex A5 is determined for each target analyte.
f. Measure PM emissions or non-Hg HAP metals. |
   i. For PM only: Method 5 of 40 CFR part 60, appendix A–3; or.
   ii. For PM or non-Hg HAP metals: Method 29 of 40 CFR part 60, appendix A–8. | ASTM D6784–02 (Reapproved 2008) (incorporated by reference, see §63.14) may be used as an alternative to Method 29 (portion for Hg only).
g. Measure Hg emissions. | Method 29 of 40 CFR part 60, appendix A–8. | Using the procedures in §63.8445(g)(1), you must determine the maximum process rate(s) for your kiln(s) that would ensure total facility maximum potential HCl-equivalent emissions remain at or below the HCl-equivalent limit in Table 1 to this subpart. The maximum process rate(s) would become your site-specific process rate operating limit(s).

2. Tunnel kiln with no add-on control. | Establish the operating limit(s) for kiln process rate if the total facility maximum potential HCl-equivalent emissions are greater than the HCl-equivalent limit in Table 1 to this subpart. | Using the procedures in §63.8445(g)(1), you must determine the maximum process rate(s) for your kiln(s) that would ensure total facility maximum potential HCl-equivalent emissions remain at or below the HCl-equivalent limit in Table 1 to this subpart. The maximum process rate(s) would become your site-specific process rate operating limit(s).

3. Tunnel kiln that is complying with PM and/or Hg production-based emission limits. | Determine the production rate during each PM/Hg test run in order to determine compliance with PM and/or Hg production-based emission limits. | You must measure and record the production rate, on a fired-product basis, of the affected source for each of the three test runs.

4. Tunnel kiln equipped with a DLA. | a. Establish the operating limit for the average pressure drop across the DLA. | You must continuously measure the pressure drop across the DLA, determine and record the block average pressure drop values for the three test runs, and determine and record the 3-hour block average of the recorded pressure drop measurements for the three test runs. The average of the three test runs establishes your minimum site-specific pressure drop operating limit.
For each . . . You must . . . Using . . . According to the following requirements . . .

<p>| | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>b.</td>
<td>Establish the operating limit for the limestone feeder setting.</td>
<td>Data from the limestone feeder during the HF/HCl/Cl₂ performance test.</td>
<td>You must ensure that you maintain an adequate amount of limestone in the limestone hopper, storage bin (located at the top of the DLA), and DLA at all times during the performance test. You must establish your limestone feeder setting, on a per ton of fired product basis, one week prior to the performance test and maintain the feeder setting for the one-week period that precedes the performance test and during the performance test.</td>
</tr>
<tr>
<td>c.</td>
<td>Document the source and grade of limestone used.</td>
<td>Records of limestone purchase.</td>
<td></td>
</tr>
</tbody>
</table>

5. **Tunnel kiln equipped with a DIFF or DLS/FF.**

   Establish the operating limit for the lime feeder setting.

   Data from the lime feeder during the HF/HCl/Cl₂ performance test.

   For continuous lime injection systems, you must ensure that lime in the feed hopper or silo and to the APCD is free-flowing at all times during the performance test and record the feeder setting, on a per ton of fired product basis, for the three test runs. If the feed rate setting varies during the three test runs, determine and record the average feed rate from the three test runs. The average of the three test runs establishes your minimum site-specific feed rate operating limit.

6. **Tunnel kiln equipped with a WS.**

   a. Establish the operating limit for the average scrubber liquid pH.

   Data from the pH measurement device during the performance HF/HCl/Cl₂ performance test.

   You must continuously measure the scrubber liquid pH, determine and record the block average pH values for the three test runs, and determine and record the 3-hour block average of the recorded pH measurements for the three test runs. The average of the three test runs establishes your minimum site-specific liquid pH operating limit.

   b. Establish the operating limit for the average scrubber liquid flow rate.

   Data from the flow rate measurement device during the HF/HCl/Cl₂ and PM/non-Hg HAP metals performance tests.

   You must continuously measure the scrubber liquid flow rate, determine and record the block average flow rate values for the three test runs, and determine and record the 3-hour block average of the recorded flow rate measurements for the three test runs. The average of the three test runs establishes your minimum site-specific liquid flow rate operating level. If different average wet scrubber liquid flow rate values are measured during the HF/HCl/Cl₂ and PM/non-Hg HAP metals tests, the highest of the average values become your site-specific operating limit.

7. **Tunnel kiln equipped with an ACI system.**

   Establish the operating limit for the average carbon flow rate.

   Data from the carbon flow rate measurement conducted during the Hg performance test.

   You must measure the carbon flow rate during each test run, determine and record the block average carbon flow rate values for the three test runs, and determine and record the 3-hour block average of the recorded carbon flow rate measurements for the three test runs. The average of the three test runs establishes your minimum site-specific activated carbon flow rate operating limit.
As stated in §63.8455, you must demonstrate initial compliance with each emission limitation and work practice standard that applies to you according to the following table:

<table>
<thead>
<tr>
<th>For each . . .</th>
<th>For the following . . .</th>
<th>You have demonstrated initial compliance if . . .</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Collection of all tunnel kilns at the facility, including all process streams.</td>
<td>a. HF, HCl, and Cl\textsubscript{2} emissions must not exceed 26 kg/hr (57 lb/hr) HCl equivalent.</td>
<td>i. You measure HF, HCl, and Cl\textsubscript{2} emissions for each kiln using Method 26 or 26A of 40 CFR part 60, appendix A-8 or its alternative, ASTM D6735-01 (Reapproved 2009) (incorporated by reference, see §63.14); or Method 320 of appendix A of this part or its alternative, ASTM D6348-03 (Reapproved 2010) (incorporated by reference, see §63.14); and ii. You calculate the HCl-equivalent emissions for each kiln using Equation 2 to this subpart; and iii. You sum the HCl-equivalent values for all kilns at the facility using Equation 3 to this subpart; and iv. The facility total HCl-equivalent does not exceed 26 kg/hr (57 lb/hr).</td>
</tr>
<tr>
<td>2. Existing large tunnel kiln (design capacity (\geq)10 tph of fired product), including all process streams.</td>
<td>a. PM emissions must not exceed 0.018 kg/Mg (0.036 lb/ton) of fired product or 6.6 mg/dscm (0.0029 gr/dscf) at 17% (O_2) or .</td>
<td>i. The PM emissions measured using Method 5 of 40 CFR part 60, appendix A-3 or Method 29 of 40 CFR part 60, appendix A-8, over the period of the initial performance test, according to the calculations in §63.8445(f)(1), do not exceed 0.018 kg/Mg (0.036 lb/ton) of fired product or 6.6 mg/dscm (0.0029 gr/dscf) at 17% (O_2); and ii. You establish and have a record of the applicable operating limits listed in Table 2 to this subpart over the 3-hour performance test during which PM emissions did not exceed 0.018 kg/Mg (0.036 lb/ton) of fired product or 6.6 mg/dscm (0.0029 gr/dscf) at 17% (O_2).</td>
</tr>
<tr>
<td></td>
<td>b. Non-Hg HAP metals emissions must not exceed 0.0026 kg/hr (0.0057 lb/hr).</td>
<td>i. The non-Hg HAP metals emissions measured using Method 29 of 40 CFR part 60, appendix A-8 or its alternative, ASTM D6784-02 (Reapproved 2008) (incorporated by reference, see §63.14), over the period of the initial performance test, do not exceed 0.0026 kg/hr (0.0057 lb/hr); and ii. You establish and have a record of the applicable operating limits listed in Table 2 to this subpart over the 3-hour performance test during which non-Hg HAP metals emissions did not exceed 0.0026 kg/hr (0.0057 lb/hr).</td>
</tr>
<tr>
<td></td>
<td>c. Hg emissions must not exceed 2.1 E–05 kg/Mg (4.1 E–05 lb/ton) of fired product or 7.7 (\mu)g/dscm at 17% (O_2) or 2.5 E–04 kg/hr (5.5 E–04 lb/hr).</td>
<td>i. The Hg emissions measured using Method 29 of 40 CFR part 60, appendix A-8 or its alternative, ASTM D6784-02 (Reapproved 2008) (incorporated by reference, see §63.14), over the period of the initial performance test, do not exceed 2.1 E–05 kg/Mg (4.1 E–05 lb/ton) of fired product or 7.7 (\mu)g/dscm at 17% (O_2); or 2.5 E–04 kg/hr (5.5 E–04 lb/hr); and ii. You establish and have a record of the applicable operating limits listed in Table 2 to this subpart over the 3-hour performance test during which Hg emissions did not exceed 2.1 E–05 kg/Mg (4.1 E–05 lb/ton) of fired product or 7.7 (\mu)g/dscm at 17% (O_2); or 2.5 E–04 kg/hr (5.5 E–04 lb/hr).</td>
</tr>
</tbody>
</table>
3. Existing small tunnel kiln (design capacity <10 tph of fired product), including all process streams.

a. PM emissions must not exceed 0.19 kg/Mg (0.37 lb/ton) of fired product or 4.8 mg/dscm (0.0021 gr/dscf) at 17% O\textsubscript{2}; or.

i. The PM emissions measured using Method 5 of 40 CFR part 60, appendix A–3 or Method 29 of 40 CFR part 60, appendix A–8, over the period of the initial performance test, according to the calculations in §63.8445(f)(1), do not exceed 0.19 kg/Mg (0.37 lb/ton) of fired product or 4.8 mg/dscm (0.0021 gr/dscf) at 17% O\textsubscript{2}; and

ii. You establish and have a record of the applicable operating limits listed in Table 2 to this subpart over the 3-hour performance test during which PM emissions did not exceed 0.19 kg/Mg (0.37 lb/ton) of fired product or 4.8 mg/dscm (0.0021 gr/dscf) at 17% O\textsubscript{2}.

b. Non-Hg HAP metals emissions must not exceed 0.047 kg/hr (0.11 lb/hr).

i. The non-Hg HAP metals emissions measured using Method 29 of 40 CFR part 60, appendix A–8, over the period of the initial performance test, do not exceed 0.047 kg/hr (0.11 lb/hr); and

ii. You establish and have a record of the applicable operating limits listed in Table 2 to this subpart over the 3-hour performance test during which non-Hg HAP metals emissions did not exceed 0.047 kg/hr (0.11 lb/hr).

c. Hg emissions must not exceed 1.7 E–04 kg/Mg (3.3 E–04 lb/ton) of fired product or 91 μg/dscm at 17% O\textsubscript{2} or 8.5 E–04 kg/hr (0.0019 lb/hr).

i. The Hg emissions measured using Method 29 of 40 CFR part 60, appendix A–8 or its alternative, ASTM D6784–02 (Reapproved 2008) (incorporated by reference, see §63.14), over the period of the initial performance test, do not exceed 1.7 E–04 kg/Mg (3.3 E–04 lb/ton) of fired product or 91 μg/dscm at 17% O\textsubscript{2} or 8.5 E–04 kg/hr (0.0019 lb/hr); and

ii. You establish and have a record of the applicable operating limits listed in Table 2 to this subpart over the 3-hour performance test during which Hg emissions did not exceed 1.7 E–04 kg/Mg (3.3 E–04 lb/ton) of fired product or 91 μg/dscm at 17% O\textsubscript{2} or 8.5 E–04 kg/hr (0.0019 lb/hr).

4. New or reconstructed large tunnel kiln (design capacity ≥10 tph of fired product), including all process streams.

a. PM emissions must not exceed 0.0089 kg/Mg (0.018 lb/ton) of fired product or 3.2 mg/dscm (0.0014 gr/dscf) at 17% O\textsubscript{2}; or.

i. The PM emissions measured using Method 5 of 40 CFR part 60, appendix A–3, over the period of the initial performance test, according to the calculations in §63.8445(f)(1), do not exceed 0.0089 kg/Mg (0.018 lb/ton) of fired product or 3.2 mg/dscm (0.0014 gr/dscf) at 17% O\textsubscript{2}; and

ii. You establish and have a record of the applicable operating limits listed in Table 2 to this subpart over the 3-hour performance test during which PM emissions did not exceed 0.0089 kg/Mg (0.018 lb/ton) of fired product or 3.2 mg/dscm (0.0014 gr/dscf) at 17% O\textsubscript{2}.

b. Non-Hg HAP metals emissions must not exceed 0.0026 kg/hr (0.0057 lb/hr).

i. The non-Hg HAP metals emissions measured using Method 29 of 40 CFR part 60, appendix A–8, over the period of the initial performance test, do not exceed 0.0026 kg/hr (0.0057 lb/hr); and...
For each . . . For the following . . . You have demonstrated initial compliance if . . .

ii. You establish and have a record of the applicable operating limits listed in Table 2 to this subpart over the 3-hour performance test during which non-Hg HAP metals emissions did not exceed 0.0026 kg/hr (0.0057 lb/hr).

c. Hg emissions must not exceed 1.4 \( \times 10^{-5} \) kg/Mg (2.8 \( \times 10^{-5} \) lb/ton) of fired product or 6.2 \( \mu \)g/dscm at 17% \( \text{O}_2 \) or 1.6 \( \times 10^{-4} \) kg/hr (3.4 \( \times 10^{-4} \) lb/hr).

i. The Hg emissions measured using Method 29 of 40 CFR part 60, appendix A–8 or its alternative, ASTM D6784–02 (Reapproved 2008) (incorporated by reference, see §63.14), over the period of the initial performance test, do not exceed 1.4 \( \times 10^{-5} \) kg/Mg (2.8 \( \times 10^{-5} \) lb/ton) of fired product or 6.2 \( \mu \)g/dscm at 17% \( \text{O}_2 \) or 1.6 \( \times 10^{-4} \) kg/hr (3.4 \( \times 10^{-4} \) lb/hr); and

ii. You establish and have a record of the applicable operating limits listed in Table 2 to this subpart over the 3-hour performance test during which Hg emissions did not exceed 1.4 \( \times 10^{-5} \) kg/Mg (2.8 \( \times 10^{-5} \) lb/ton) of fired product or 6.2 \( \mu \)g/dscm at 17% \( \text{O}_2 \) or 1.6 \( \times 10^{-4} \) kg/hr (3.4 \( \times 10^{-4} \) lb/hr).

5. New or reconstructed small tunnel kiln (design capacity <10 tph of fired product), including all process streams.

a. PM emissions must not exceed 0.015 kg/Mg (0.030 lb/ton) of fired product or 4.7 mg/dscm (0.0021 gr/dscf) at 17% \( \text{O}_2 \); or.

i. The PM emissions measured using Method 5 of 40 CFR part 60, appendix A–3, over the period of the initial performance test, according to the calculations in §63.8445(f)(1), do not exceed 0.015 kg/Mg (0.030 lb/ton) of fired product or 4.7 mg/dscm (0.0021 gr/dscf) at 17% \( \text{O}_2 \); and

ii. You establish and have a record of the applicable operating limits listed in Table 2 to this subpart over the 3-hour performance test during which PM emissions did not exceed 0.015 kg/Mg (0.030 lb/ton) of fired product or 4.7 mg/dscm (0.0021 gr/dscf) at 17% \( \text{O}_2 \).

b. Non-Hg HAP metals emissions must not exceed 0.047 kg/hr (0.11 lb/hr).

i. The non-Hg HAP metals emissions measured using Method 29 of 40 CFR part 60, appendix A–8, over the period of the initial performance test, do not exceed 0.047 kg/hr (0.11 lb/hr); and

ii. You establish and have a record of the applicable operating limits listed in Table 2 to this subpart over the 3-hour performance test during which non-Hg HAP metals emissions did not exceed 0.047 kg/hr (0.11 lb/hr).

c. Hg emissions must not exceed 1.7 \( \times 10^{-4} \) kg/Mg (3.3 \( \times 10^{-4} \) lb/ton) of fired product or 91 \( \mu \)g/dscm at 17% \( \text{O}_2 \) or 8.5 \( \times 10^{-4} \) kg/hr (0.0019 lb/hr).

i. The Hg emissions measured using Method 29 of 40 CFR part 60, appendix A–8 or its alternative, ASTM D6784–02 (Reapproved 2008) (incorporated by reference, see §63.14), over the period of the initial performance test, do not exceed 1.7 \( \times 10^{-4} \) kg/Mg (3.3 \( \times 10^{-4} \) lb/ton) of fired product or 91 \( \mu \)g/dscm at 17% \( \text{O}_2 \) or 8.5 \( \times 10^{-4} \) kg/hr (0.0019 lb/hr); and

ii. You establish and have a record of the applicable operating limits listed in Table 2 to this subpart over the 3-hour performance test during which Hg emissions did not exceed 1.7 \( \times 10^{-4} \) kg/Mg (3.3 \( \times 10^{-4} \) lb/ton) of fired product or 91 \( \mu \)g/dscm at 17% \( \text{O}_2 \) or 8.5 \( \times 10^{-4} \) kg/hr (0.0019 lb/hr).
For each . . . & For the following . . . & You have demonstrated initial compliance if . . .  
--- & --- & ---  
6. Existing, new or reconstructed periodic kiln. & a. Minimize HAP emissions & i. Develop a designed firing time and temperature cycle for each periodic kiln. You must either program the time and temperature cycle into your kiln or track each step on a log sheet; and  
   & & ii. Label each periodic kiln with the maximum load (in tons) of product that can be fired in the kiln during a single firing cycle; and  
   & & iii. Develop maintenance procedures for each kiln that, at a minimum, specify the frequency of inspection and maintenance of temperature monitoring devices, controls that regulate air-to-fuel ratios, and controls that regulate firing cycles.  
7. Existing, new or reconstructed tunnel kiln. & a. Minimize dioxin/furan emissions & i. Conduct initial inspection of the burners and associated combustion controls (as applicable); and  
   & & ii. Tune the specific burner type to optimize combustion.  

### Table 6 to Subpart JJJJJ of Part 63—Continuous Compliance With Emission Limitations and Work Practice Standards

As stated in §63.8470, you must demonstrate continuous compliance with each emission limitation and work practice standard that applies to you according to the following table:

<table>
<thead>
<tr>
<th>For each . . .</th>
<th>For the following . . .</th>
<th>You must demonstrate continuous compliance by . . .</th>
</tr>
</thead>
</table>
| 1. Tunnel kiln equipped with a DLA. | a. Each emission limit in Table 1 to this subpart and each operating limit in Item 1 of Table 2 to this subpart for tunnel kilns equipped with a DLA. | i. Collecting the DLA pressure drop data according to §63.8450(a); reducing the DLA pressure drop data to 3-hour block averages according to §63.8450(a); maintaining the average pressure drop across the DLA for each 3-hour block period at or above the average pressure drop established during the HF/HCl/Cl₂ performance test in which compliance was demonstrated; or continuously monitoring the bypass stack damper position at least once every 15 minutes during normal kiln operation, and initiating corrective action within 1 hour after the bypass damper is opened allowing the kiln exhaust gas to bypass the DLA and completing corrective action in accordance with your OM&M plan; and  
   | & | ii. Verifying that the limestone hopper and storage bin (located at the top of the DLA) contain adequate limestone by performing a daily visual check, which could include one of the following: (1) Conducting a physical check of the hopper; (2) creating a visual access point, such as a window, on the side of the hopper; (3) installing a camera in the hopper that provides continuous feed to a video monitor in the control room; or (4) confirming that load level indicators in the hopper are not indicating the need for additional limestone; and  
   | & | iii. Recording the limestone feeder setting daily (on a per ton of fired product basis) to verify that the feeder setting is being maintained at or above the level established during the HF/HCl/Cl₂ performance test in which compliance was demonstrated; and  
   | & | iv. Using the same grade of limestone from the same source as was used during the HF/HCl/Cl₂ performance test; maintaining records of the source and type of limestone; and  
   | & | v. Performing VE observations of the DLA stack at the frequency specified in §63.8470(e) using Method 22 of 40 CFR part 60, appendix A–7; maintaining no VE from the DLA stack. |
4. Tunnel kiln equipped with an ACI system.
   a. Each emission limit in Table 1 to this subpart and each operating limit in Item 4 of Table 2 to this subpart for tunnel kilns equipped with ACI system.
   i. Collecting the carbon flow rate data according to § 63.8450(a); reducing the carbon flow rate data to 3-hour block averages according to § 63.8450(a); maintaining the average carbon flow rate for each 3-hour block period at or above the average carbon flow rate established during the Hg performance test in which compliance was demonstrated.

5. Tunnel kiln with no add-on control.
   a. Each emission limit in Table 1 to this subpart and each operating limit in Item 5 of Table 2 to this subpart for tunnel kilns with no add-on control.
   i. Performing VE observations of the stack at the frequency specified in § 63.8470(e) using Method 22 of 40 CFR part 60, appendix A–7; and maintaining no VE from the stack.
   ii. If your last calculated total facility maximum potential HCl-equivalent was not at or below the health-based standard in Table 1 to this subpart, collecting the kiln process rate data according to § 63.8450(a); reducing the kiln process rate data to 3-hour block averages according to § 63.8450(a); maintaining the average kiln process rate for each 3-hour block period at or below the kiln process rate determined according to § 63.8445(g)(1).

6. Periodic kiln.
   a. Minimize HAP emissions;
      i. Using a designed firing time and temperature cycle for each periodic kiln and documenting the kiln loading and temperature profile for each periodic kiln.
   b. For each firing load, documenting the total tonnage of product placed in the kiln to ensure that it is not greater than the maximum load identified in Item 1.a.ii of Table 3 to this subpart.
### Table 7 to Subpart JJJJ of Part 63—Compliance Dates

As stated in §63.8395, you must meet each compliance date in the following table that applies to you:

<table>
<thead>
<tr>
<th>If you have</th>
<th>Then you must</th>
<th>No later than</th>
<th>As specified in</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. New or reconstructed affected source and the initial startup of your affected source is after December 18, 2014, but before December 28, 2015.</td>
<td>Comply with the applicable emission limitations and work practice standards in Tables 1, 2, and 3 to this subpart.</td>
<td>December 28, 2015.</td>
<td>§63.8395(b)</td>
</tr>
<tr>
<td>2. New or reconstructed affected source and the initial startup of your affected source is after December 28, 2015.</td>
<td>Comply with the applicable emission limitations and work practice standards in Tables 1, 2, and 3 to this subpart.</td>
<td>Initial startup of your affected source.</td>
<td>§63.8395(b)</td>
</tr>
<tr>
<td>3. Existing affected source</td>
<td>Comply with the applicable emission limitations and work practice standards in Tables 1, 2, and 3 to this subpart.</td>
<td>Initial startup of your affected source as a major source.</td>
<td>§63.8395(b)</td>
</tr>
<tr>
<td>4. Existing area source that increases its emissions or its potential to emit such that it becomes a major source of HAP by adding a new affected source or by reconstructing.</td>
<td>Be in compliance with this subpart . . .</td>
<td>Initial startup of your affected source as a major source.</td>
<td>§63.8395(b)</td>
</tr>
<tr>
<td>5. New area source (i.e., an area source for which construction or reconstruction commenced after December 18, 2014) that increases its emissions or its potential to emit such that it becomes a major source of HAP.</td>
<td>Be in compliance with this subpart . . .</td>
<td>Initial startup of your affected source as a major source.</td>
<td>§63.8395(b)</td>
</tr>
</tbody>
</table>

### Table 8 to Subpart JJJJ of Part 63—Deadlines for Submitting Notifications

As stated in §63.8480, you must submit each notification that applies to you according to the following table:

<table>
<thead>
<tr>
<th>If you . . .</th>
<th>You must . . .</th>
<th>No later than . . .</th>
<th>As specified in . . .</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. Start up your new or reconstructed affected source on or after December 28, 2015.</td>
<td>Submit an Initial Notification.</td>
<td>120 calendar days after you become subject to this subpart.</td>
<td>§63.9(b)(2).</td>
</tr>
<tr>
<td>3. Are required to conduct a performance test.</td>
<td>Submit a notification of intent to conduct a performance test.</td>
<td>60 calendar days before the performance test is scheduled to begin.</td>
<td>§63.7(b)(1).</td>
</tr>
<tr>
<td>4. Are required to conduct a compliance demonstration that includes a performance test according to the requirements in Table 4 to this subpart.</td>
<td>Submit a Notice of Compliance Status, including the performance test results.</td>
<td>60 calendar days following the completion of the performance test, by the close of business.</td>
<td>§63.9(h) and §63.10(d)(2).</td>
</tr>
</tbody>
</table>
### Table 9 to Subpart JJJJJ of Part 63—Requirements for Reports

As stated in §63.8485, you must submit each report that applies to you according to the following table:

<table>
<thead>
<tr>
<th>You must submit . . .</th>
<th>The report must contain . . .</th>
<th>You must submit the report . . .</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. A compliance report.</td>
<td>a. If there are no deviations from any emission limitations (emission limits, operating limits) that apply to you, a statement that there were no deviations from the emission limitations during the reporting period. If there were no periods during which the CMS was out-of-control as specified in your OM&amp;M plan, a statement that there were no periods during which the CMS was out-of-control during the reporting period.</td>
<td>Semiannually according to the requirements in §63.8485(b).</td>
</tr>
<tr>
<td></td>
<td>b. If you have a deviation from any emission limitation (emission limit, operating limit) during the reporting period, the report must contain the information in §63.8485(c)(9). If there were periods during which the CMS was out-of-control, as specified in your OM&amp;M plan, the report must contain the information in §63.8485(d).</td>
<td>Semiannually according to the requirements in §63.8485(b).</td>
</tr>
</tbody>
</table>

### Table 10 to Subpart JJJJJ of Part 63—Applicability of General Provisions to Subpart JJJJJ

As stated in §63.8505, you must comply with the General Provisions in §§63.1 through 61.16 that apply to you according to the following table:

<table>
<thead>
<tr>
<th>Citation</th>
<th>Subject</th>
<th>Brief description</th>
<th>Applies to subpart JJJJJ?</th>
</tr>
</thead>
<tbody>
<tr>
<td>§63.1</td>
<td>Applicability</td>
<td>Initial applicability determination; applicability after standard established; permit requirements; extensions, notifications.</td>
<td>Yes.</td>
</tr>
<tr>
<td>§63.2</td>
<td>Definitions</td>
<td>Definitions for part 63 standards.</td>
<td>Yes.</td>
</tr>
<tr>
<td>§63.3</td>
<td>Units and Abbreviations</td>
<td>Units and abbreviations for part 63 standards.</td>
<td>Yes.</td>
</tr>
<tr>
<td>§63.4</td>
<td>Prohibited Activities</td>
<td>Compliance date; circumvention; severability.</td>
<td>Yes.</td>
</tr>
<tr>
<td>§63.5</td>
<td>Construction/Reconstruction</td>
<td>Applicability; applications; approvals . . .</td>
<td>Yes.</td>
</tr>
<tr>
<td>§63.6(a)</td>
<td>Applicability</td>
<td>General Provisions (GP) apply unless compliance extension; GP apply to area sources that become major.</td>
<td>Yes.</td>
</tr>
<tr>
<td>§63.6(b)(1)–(4)</td>
<td>Compliance Dates for New and Reconstructed sources.</td>
<td>Standards apply at effective date; 3 years after effective date; upon startup; 10 years after construction or reconstruction commences for section 112(f).</td>
<td>Yes.</td>
</tr>
<tr>
<td>§63.6(b)(5)</td>
<td>Notification</td>
<td>Must notify if commenced construction or reconstruction after proposal.</td>
<td>Yes.</td>
</tr>
<tr>
<td>§63.6(b)(6)</td>
<td>[Reserved]</td>
<td></td>
<td></td>
</tr>
<tr>
<td>§63.6(b)(7)</td>
<td>Compliance Dates for New and Reconstructed Area Sources That Become Major.</td>
<td>Area sources that become major must comply with major source standards immediately upon becoming major, regardless of whether required to comply when they were area sources.</td>
<td>Yes.</td>
</tr>
<tr>
<td>Citation</td>
<td>Subject</td>
<td>Brief Description</td>
<td>Applies to subpart JJJJJ?</td>
</tr>
<tr>
<td>----------</td>
<td>---------</td>
<td>------------------</td>
<td>--------------------------</td>
</tr>
<tr>
<td>§ 63.6(c)(1)–(2)</td>
<td>Compliance Dates for Existing Sources.</td>
<td>Comply according to date in subpart, which must be no later than 3 years after effective date; for section 112(f) standards, comply within 90 calendar days of effective date unless compliance extension.</td>
<td>Yes.</td>
</tr>
<tr>
<td>§ 63.6(c)(3)–(4)</td>
<td>[Reserved]</td>
<td></td>
<td>No.</td>
</tr>
<tr>
<td>§ 63.6(c)(5)</td>
<td>Compliance Dates for Existing Area Sources That Become Major.</td>
<td>Area sources that become major must comply with major source standards by date indicated in subpart or by equivalent time period (for example, 3 years).</td>
<td>Yes.</td>
</tr>
<tr>
<td>§ 63.6(d)</td>
<td>Operation &amp; Maintenance.</td>
<td>General Duty to minimize emissions.</td>
<td>No. See § 63.8420(b) for general duty requirement.</td>
</tr>
<tr>
<td>§ 63.6(e)(1)(i)</td>
<td>Operation &amp; Maintenance.</td>
<td>Requirement to correct malfunctions ASAP.</td>
<td>No.</td>
</tr>
<tr>
<td>§ 63.6(e)(1)(ii)</td>
<td>Operation &amp; Maintenance.</td>
<td>Operation and maintenance requirements enforceable independent of emissions limitations.</td>
<td>Yes.</td>
</tr>
<tr>
<td>§ 63.6(e)(2)</td>
<td>[Reserved]</td>
<td></td>
<td>No.</td>
</tr>
<tr>
<td>§ 63.6(e)(3)</td>
<td>[Reserved]</td>
<td></td>
<td>No.</td>
</tr>
<tr>
<td>§ 63.7(a)(1)–(2)</td>
<td>Performance Test Dates.</td>
<td>Dates for conducting initial performance testing and other compliance demonstrations for emission limits and work practice standards; must conduct 180 calendar days after first subject to rule.</td>
<td>Yes.</td>
</tr>
<tr>
<td>§ 63.7(a)(3)</td>
<td>Section 114 Authority.</td>
<td>Administrator may require a performance test under CAA section 114 at any time.</td>
<td>Yes.</td>
</tr>
<tr>
<td>§ 63.7(a)(4)</td>
<td>Notification of Delay in Performance Testing Due To Force Majeure.</td>
<td>Must notify Administrator of delay in performance testing due to force majeure.</td>
<td>Yes.</td>
</tr>
<tr>
<td>§ 63.7(b)(1)</td>
<td>Notification of Performance Test.</td>
<td>Must notify Administrator 60 calendar days before the test.</td>
<td>Yes.</td>
</tr>
<tr>
<td>§ 63.7(b)(2)</td>
<td>Notification of Rescheduling.</td>
<td>Must notify Administrator 5 calendar days before scheduled date of rescheduled date.</td>
<td>Yes.</td>
</tr>
<tr>
<td>§ 63.7(c)</td>
<td>Quality Assurance/QA/Test Plan.</td>
<td>Requirements; test plan approval procedures; performance audit requirements; internal and external QA procedures for testing.</td>
<td>Yes.</td>
</tr>
<tr>
<td>§ 63.7(d)</td>
<td>Testing Facilities.</td>
<td>Requirements for testing facilities.</td>
<td>Yes. §63.8445 specifies requirements.</td>
</tr>
<tr>
<td>§ 63.7(e)(1)</td>
<td>Conditions for Conducting Performance Tests.</td>
<td>Must conduct performance tests during SSM; not a violation to exceed standards during SSM.</td>
<td>Yes.</td>
</tr>
<tr>
<td>§ 63.7(e)(2)–(3)</td>
<td>Conditions for Conducting Performance Tests.</td>
<td>Cannot conduct performance tests during SSM: must have at least three test runs of at least 1 hour each; compliance is based on arithmetic mean of three runs; conditions when data from an additional test run can be used.</td>
<td>Yes.</td>
</tr>
<tr>
<td>§ 63.7(e)(4)</td>
<td>Testing under Section 114.</td>
<td>Administrator’s authority to require testing under section 114 of the Act.</td>
<td>Yes.</td>
</tr>
<tr>
<td>§ 63.7(f)</td>
<td>Alternative Test Method.</td>
<td>Procedures by which Administrator can grant approval to use an alternative test method.</td>
<td>Yes.</td>
</tr>
<tr>
<td>Citation</td>
<td>Subject</td>
<td>Brief description</td>
<td>Applies to subpart JJJJJ?</td>
</tr>
<tr>
<td>----------</td>
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</tr>
<tr>
<td>§ 63.7(g)</td>
<td>Performance Test Data Analysis.</td>
<td>Must include raw data in performance test report; must submit performance test data 60 calendar days after end of test with the notification of compliance status.</td>
<td>Yes.</td>
</tr>
<tr>
<td>§ 63.7(h)</td>
<td>Waiver of Tests</td>
<td>Procedures for Administrator to waive performance test.</td>
<td>Yes.</td>
</tr>
<tr>
<td>§ 63.8(a)(1)</td>
<td>Applicability of Monitoring Requirements.</td>
<td>Subject to all monitoring requirements in subpart.</td>
<td>Yes.</td>
</tr>
<tr>
<td>§ 63.8(a)(3)</td>
<td>Monitoring with Flares.</td>
<td>Requirements for flares in §63.11 apply</td>
<td>No, not applicable.</td>
</tr>
<tr>
<td>§ 63.8(b)(1)</td>
<td>Monitoring</td>
<td>Must conduct monitoring according to standard unless Administrator approves alternative.</td>
<td>Yes.</td>
</tr>
<tr>
<td>§ 63.8(b)(2)–(3)</td>
<td>Multiple Effluents and Multiple Monitoring Systems.</td>
<td>Specific requirements for installing and reporting on monitoring systems.</td>
<td>Yes.</td>
</tr>
<tr>
<td>§ 63.8(c)(1)</td>
<td>Monitoring System Operation and Maintenance.</td>
<td>Maintenance consistent with good air pollution control practices.</td>
<td>Yes.</td>
</tr>
<tr>
<td>§ 63.8(c)(1)(i)</td>
<td>Routine and Predictable SSM.</td>
<td>Reporting requirements for SSM when action is described in SSMP.</td>
<td>No.</td>
</tr>
<tr>
<td>§ 63.8(c)(1)(ii)</td>
<td>Compliance with Operation and Maintenance Requirements.</td>
<td>How Administrator determines if source complying with operation and maintenance requirements.</td>
<td>No.</td>
</tr>
<tr>
<td>§ 63.8(c)(2)–(3)</td>
<td>Monitoring System Installation.</td>
<td>Must install to get representative emission and parameter measurements.</td>
<td>Yes.</td>
</tr>
<tr>
<td>§ 63.8(c)(4)</td>
<td>CMS Requirements</td>
<td>Requirements for CMS</td>
<td>No, §63.8450 specifies requirements.</td>
</tr>
<tr>
<td>§ 63.8(c)(5)</td>
<td>ContinuousOpacity Monitoring System (COMS) Minimum Procedures.</td>
<td>COMS minimum procedures</td>
<td>No, not applicable.</td>
</tr>
<tr>
<td>§ 63.8(c)(6)</td>
<td>CMS Requirements</td>
<td>Zero and high level calibration check requirements.</td>
<td>Yes.</td>
</tr>
<tr>
<td>§ 63.8(c)(7)–(8)</td>
<td>CMS Quality Control</td>
<td>Requirements for CMS quality control</td>
<td>Yes.</td>
</tr>
<tr>
<td>§ 63.8(c)(3)</td>
<td>Written procedures for CMS</td>
<td>Yes.</td>
<td></td>
</tr>
<tr>
<td>§ 63.8(e)</td>
<td>CMS Performance Evaluation.</td>
<td>Requirements for CMS performance evaluation.</td>
<td>Yes.</td>
</tr>
<tr>
<td>§ 63.8(f)(1)–(5)</td>
<td>Alternative Monitoring Method.</td>
<td>Procedures for Administrator to approve alternative monitoring.</td>
<td>Yes.</td>
</tr>
<tr>
<td>§ 63.8(f)(6)</td>
<td>Alternative to Relative Accuracy Test.</td>
<td>Procedures for Administrator to approve alternative relative accuracy test for continuous emissions monitoring systems (CEMS).</td>
<td>No, not applicable.</td>
</tr>
<tr>
<td>§ 63.8(g)</td>
<td>Data Reduction</td>
<td>COMS and CEMS data reduction requirements.</td>
<td>No, not applicable.</td>
</tr>
<tr>
<td>§ 63.9(a)</td>
<td>Notification Requirements.</td>
<td>Applicability; State delegation</td>
<td>Yes.</td>
</tr>
<tr>
<td>§ 63.9(b)</td>
<td>Initial Notifications</td>
<td>Requirements for initial notifications.</td>
<td>Yes.</td>
</tr>
<tr>
<td>§ 63.9(c)</td>
<td>Request for Compliance Extension.</td>
<td>Can request if cannot comply by date or if installed BACT/LAER.</td>
<td>Yes.</td>
</tr>
<tr>
<td>§ 63.9(d)</td>
<td>Notification of Special Compliance Requirements for New Source.</td>
<td>For sources that commence construction between proposal and promulgation and want to comply 3 years after effective date.</td>
<td>Yes.</td>
</tr>
<tr>
<td>§ 63.9(e)</td>
<td>Notification of Performance Test.</td>
<td>Notify Administrator 60 calendar days prior.</td>
<td>Yes.</td>
</tr>
<tr>
<td>§ 63.9(f)</td>
<td>Notification of VE/Optical Test.</td>
<td>Notify Administrator 30 calendar days prior.</td>
<td>No, not applicable.</td>
</tr>
<tr>
<td>§ 63.9(g)(1)</td>
<td>Additional Notifications When Using CMS.</td>
<td>Notification of performance evaluation</td>
<td>Yes.</td>
</tr>
</tbody>
</table>
## § 63.8530
### WHAT THIS SUBPART COVERS

This subpart establishes national emission limitations and work practice standards for hazardous air pollutants (HAP) emitted from clay ceramics manufacturing.

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

**SOURCE:** 80 FR 65543, Oct. 26, 2015, unless otherwise noted.

### Citation | Subject | Brief description | Applies to subpart JJJJJ?
--- | --- | --- | ---
§ 63.9(g)(2)–(3) | Additional Notifications When Using CMS. | Notification of COMS data use; notification that relative accuracy alternative criterion were exceeded. | No, not applicable.
§ 63.9(h) | Notification of Compliance Status. | Contents; submittal requirements. | Yes.
§ 63.9(i) | Adjustment of Submittal Deadlines. | Procedures for Administrator to approve change in when notifications must be submitted. | Yes.
§ 63.9(j) | Change in Previous Information. | Must submit within 15 calendar days after the change. | Yes.
§ 63.9(g)(2)–(3) | Additional Notifications When Using CMS. | Notification of COMS data use; notification that relative accuracy alternative criterion were exceeded. | No, not applicable.
§ 63.9(h) | Notification of Compliance Status. | Contents; submittal requirements. | Yes.
§ 63.9(i) | Adjustment of Submittal Deadlines. | Procedures for Administrator to approve change in when notifications must be submitted. | Yes.
§ 63.9(j) | Change in Previous Information. | Must submit within 15 calendar days after the change. | Yes.
§ 63.10(a) | Recordkeeping/Reporting. | Applicability; general information. | Yes.
§ 63.10(b)(1) | General Recordkeeping Requirements. | General requirements. | Yes.
§ 63.10(b)(2)(i) | Records Related to SSM. | Recordkeeping of occurrence and duration of startups and shutdowns. | No.
§ 63.10(b)(2)(ii) | Records Related to SSM. | Recordkeeping of failures to meet a standard. | No. See §63.8490(c)(2) for recordkeeping of (1) date, time and duration; (2) listing of affected source or equipment, and an estimate of the volume of each regulated pollutant emitted over the standard; and (3) actions to minimize emissions and correct the failure.
§ 63.10(b)(2)(iii) | Records Related to SSM. | Maintenance records. | No.
§ 63.10(b)(2)(iv)–(v) | Records Related to SSM. | Actions taken to minimize emissions during SSM. | No.
§ 63.10(b)(2)(vi)–(xii) and (xiv) | CMS Records. | Records when CMS is malfunctioning, inoperative or out-of-control. | Yes.
§ 63.10(b)(2)(xiii) | Records Related to SSM. | Records when using alternative to relative accuracy test. | Yes.
§ 63.10(b)(3) | Records. | Applicability Determinations. | Yes.
§ 63.10(c)(1)–(15) | Additional Records for CMS. | Additional records for CMS. | No. §§63.8425 and 63.8490 specify requirements.
§ 63.10(d)(1) and (2) | General Reporting Requirements. | Requirements for reporting; performance test results reporting. | Yes.
§ 63.10(d)(3) | Reporting Opacity or VE Observations. | Requirements for reporting opacity and VE. | No, not applicable.
§ 63.10(d)(4) | Progress Reports. | Must submit progress reports on schedule if under compliance extension. | Yes.
§ 63.10(d)(5) | SSM Reports. | Contents and submission. | No. See §63.8485(c)(9) for malfunction reporting requirements.
§ 63.10(e)(1)–(3) | Additional CMS Reports. | Requirements for CMS reporting. | No, §§63.8425 and 63.8485 specify requirements.
§ 63.10(e)(4) | Reporting COMS Data. | Requirements for reporting COMS data with performance test data. | No, not applicable.
§ 63.10(f) | Waiver for Recordkeeping/Reporting. | Procedures for Administrator to waive. | Yes.
§ 63.11 | Delegation. | State authority to enforce standards. | No, not applicable.
§ 63.12 | Addresses. | Addresses for reports, notifications, requests. | Yes.
§ 63.15 | Information Availability; Confidential Information. | Information availability; confidential information. | Yes.
§ 63.16 | Performance Track Provisions. | Requirements for Performance Track member facilities. | Yes.
manufacturing facilities. This subpart also establishes requirements to demonstrate initial and continuous compliance with the emission limitations and work practice standards.

§ 63.8535 Am I subject to this subpart?
You are subject to this subpart if you own or operate a clay ceramics manufacturing facility that is, is located at, or is part of a major source of HAP emissions according to the criteria in paragraphs (a) and (b) of this section.

(a) A clay ceramics manufacturing facility is a plant site that manufactures pressed floor tile, pressed wall tile, other pressed tile, or sanitaryware (e.g., sinks and toilets). Clay ceramics manufacturing facilities typically process clay, shale, and various additives; form the processed materials into tile or sanitaryware shapes; and dry and fire the ceramic products. Glazes are applied to many tile and sanitaryware products. A plant site that manufactures refractory products, as defined in § 63.9824, or brick and structural clay products (BSCP), as defined in § 63.8515, is not a clay ceramics manufacturing facility.

(b) A major source of HAP emissions is any stationary source or group of stationary sources within a contiguous area under common control that emits or has the potential to emit any single HAP at a rate of 9.07 megagrams (10 tons) or more per year or any combination of HAP at a rate of 22.68 megagrams (25 tons) or more per year.

§ 63.8540 What parts of my plant does this subpart cover?
(a) This subpart applies to each existing, new, or reconstructed affected source at a clay ceramics manufacturing facility.

(b) Each existing, new, or reconstructed ceramic tile roller kiln, sanitaryware tunnel kiln, sanitaryware shuttle kiln, ceramic tile glaze line using glaze spraying, sanitaryware glaze spray booth, ceramic tile spray dryer, and floor tile press dryer is an affected source.

(c) Process units not subject to the requirements of this subpart are listed in paragraphs (c)(1) through (9) of this section.

(d) A source is a new affected source if construction of the affected source began after December 18, 2014, and you met the applicability criteria at the time you began construction.

(e) An affected source is reconstructed if you meet the criteria as defined in § 63.2.

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

§ 63.8545 When do I have to comply with this subpart?
(a) You must comply with this subpart no later than the compliance dates in Table 8 to this subpart.

(b) You must meet the notification requirements in § 63.8630 according to the schedule in § 63.8630 and in subpart A of this part. Some of the notifications must be submitted before you are required to comply with the emission limitations in this subpart.

EMISSION LIMITATIONS AND WORK PRACTICE STANDARDS

§ 63.8555 What emission limitations and work practice standards must I meet?
(a) You must meet each emission limit in Table 1 to this subpart that applies to you.
§ 63.8560 What are my options for meeting the emission limitations and work practice standards?

(a) To meet the emission limitations in Tables 1 and 2 to this subpart, you must use one or more of the options listed in paragraphs (a)(1) and (2) of this section.

(1) Emissions control system. Use an emissions capture and collection system and an air pollution control device (APCD) and demonstrate that the resulting emissions meet the emission limits in Table 1 to this subpart, and that the capture and collection system and APCD meet the applicable operating limits in Table 2 to this subpart.

(2) Process changes. Use low-HAP raw materials or implement manufacturing process changes and demonstrate that the resulting emissions or emissions reductions meet the emission limits in Table 1 to this subpart.

(b) To meet the work practice standards for affected sanitaryware shuttle kilns, you must comply with the requirements listed in Table 3 to this subpart.

(c) To meet the work practice standards for affected sources during periods of startup and shutdown, you must comply with the requirements listed in Table 3 to this subpart.

GENERAL COMPLIANCE REQUIREMENTS

§ 63.8570 What are my general requirements for complying with this subpart?

(a) You must be in compliance with the emission limitations (including operating limits) in this subpart at all times, except during periods that you are approved for and in compliance with the alternative standard for routine control device maintenance as specified in paragraph (d) of this section, and except during periods of startup and shutdown, at which time you must comply with the applicable work practice standard specified in Table 3 to this subpart.

(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 the applicable standard have been achieved. Determination of whether a source is operating in compliance with operation and maintenance procedures, review of operation and maintenance records, and inspection of the source. During the period between the compliance date specified for your affected source in §63.8545 and the date upon which continuous monitoring systems (CMS) (e.g., continuous parameter monitoring systems) have been installed and verified and any applicable operating limits have been set, you must maintain a log detailing the operation and maintenance of the process and emissions control equipment.

(c) For each affected source that is subject to the emission limits specified in Table 1 to this subpart, you must prepare and implement a written operation, maintenance, and monitoring (OM&M) plan according to the requirements in §63.8575.

(d) If you own or operate an affected source that is subject to the emission limits specified in Table 1 to this subpart and must perform routine maintenance on the control device for that affected source, you may bypass the source control device and continue operating the affected source subject to the alternative standard established in this paragraph upon approval by the Administrator and provided you satisfy the conditions listed in paragraphs (d)(1) through (5) of this section.

(1) You must request to use the routine control device maintenance alternative standard from the Administrator no later than 120 calendar days before the compliance date specified in §63.8545. Your request must justify the need for the routine maintenance on
§ 63.8575 What do I need to know about operation, maintenance, and monitoring plans?

(a) For each affected source that is subject to the emission limits specified in Table 1 to this subpart, you must prepare, implement, and revise as necessary an OM&M plan that includes the information in paragraph (b) of this section. Your OM&M plan must be available for inspection by the delegated authority upon request.

(b) Your OM&M plan must include, as a minimum, the information in paragraphs (b)(1) through (13) of this section.

(1) Each process and APCD to be monitored, the type of monitoring device that will be used, and the operating parameters that will be monitored.

(2) A monitoring schedule that specifies the frequency that the parameter values will be determined and recorded.

(3) The limits for each parameter that represent continuous compliance with the emission limitations in §63.8555. The limits must be based on values of the monitored parameters recorded during performance tests.

(4) Procedures for the proper operation and routine and long-term maintenance of each APCD, including a maintenance and inspection schedule that is consistent with the manufacturer’s recommendations.

(5) Procedures for installing the CMS sampling probe or other interface at a measurement location relative to each affected process unit such that the measurement is representative of control of the exhaust emissions (e.g., on or downstream of the last APCD).

(6) Performance and equipment specifications for the sample interface, the pollutant concentration or parametric signal analyzer, and the data collection and reduction system.

(7) Continuous monitoring system performance evaluation procedures and acceptance criteria (e.g., calibrations).

(8) Procedures for the proper operation and maintenance of monitoring equipment consistent with the requirements in §§63.8600 and 63.8(c)(1), (3), (7), and (8).

(9) Continuous monitoring system data quality assurance procedures consistent with the requirements in §63.8(d)(1) and (2). The owner or operator shall keep these written procedures on record for the life of the affected source or until the affected source is no longer subject to the provisions of this part, to be made available for inspection, upon request, by the Administrator.

The performance evaluation plan in §63.8(d)(2) is revised,
the owner or operator shall keep previous (i.e., superseded) versions of the performance evaluation plan on record to be made available for inspection, upon request, by the Administrator, for a period of 5 years after each revision to the plan. The program of corrective action should be included in the plan required under §63.8(d)(2).

(10) Continuous monitoring system recordkeeping and reporting procedures consistent with the requirements in §§63.8635 and 63.8640.

(11) Procedures for responding to operating parameter deviations, including the procedures in paragraphs (b)(11)(i) through (iii) of this section.

(i) Procedures for determining the cause of the operating parameter deviation.

(ii) Actions necessary for correcting the deviation and returning the operating parameters to the allowable limits.

(iii) Procedures for recording the times that the deviation began and ended, and corrective actions were initiated and completed.

(12) Procedures for keeping records to document compliance.

(13) If you operate an affected source and you plan to take the source control device out of service for routine maintenance, as specified in §63.8570(d), the procedures specified in paragraphs (b)(13)(i) and (ii) of this section.

(i) Procedures for minimizing HAP emissions from the affected source during periods of routine maintenance of the source control device when the affected source is operating and the control device is offline.

(ii) Procedures for minimizing the duration of any period of routine maintenance on the source control device when the affected source is operating and the control device is offline.

(c) Changes to the operating limits in your OM&M plan require a new performance test. If you are revising an operating limit parameter value, you must meet the requirements in paragraphs (c)(1) and (2) of this section.

(1) Submit a notification of performance test to the Administrator as specified in §63.7(b).

(2) After completing the performance test, you must submit the performance test results and the revised operating limits as part of the Notification of Compliance Status required under §63.9(b).

(d) If you are revising the inspection and maintenance procedures in your OM&M plan, you do not need to conduct a new performance test.

Testing and Initial Compliance Requirements

§ 63.8585 By what date must I conduct performance tests?

For each affected source that is subject to the emission limits specified in Table 1 to this subpart, you must conduct performance tests within 180 calendar days after the compliance date that is specified for your source in §63.8545 and according to the provisions in §63.7(a)(2).

§ 63.8590 When must I conduct subsequent performance tests?

(a) For each affected source that is subject to the emission limits specified in Table 1 to this subpart, you must conduct a performance test at least every 5 years following the initial performance test.

(b) You must conduct a performance test when you want to change the parameter value for any operating limit specified in your OM&M plan.

§ 63.8595 How do I conduct performance tests and establish operating limits?

(a) You must conduct each performance test in Table 4 to this subpart that applies to you.

(b) Before conducting the performance test, you must install and calibrate all monitoring equipment.

(c) Each performance test must be conducted according to the requirements in §63.7 and under the specific conditions in Table 4 to this subpart. Stacks to be tested at sanitaryware manufacturing facilities shall be limited to products of combustion (POC) stacks and those cooling stacks with an oxygen content at or below 20.5 percent.

(d) Performance tests shall be conducted under such conditions as the
Administrator specifies to you based on representative performance of the affected source for the period being tested. Representative conditions exclude periods of startup and shutdown. You may not conduct performance tests during periods of malfunction. You must record the process information that is necessary to document operating conditions during the test and include in such record an explanation to support that such conditions represent normal operation. Upon request, you shall make available to the Administrator such records as may be necessary to determine the conditions of performance tests.

(e) You must conduct at least 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.

(f) You must use the data gathered during the performance test and the equations in paragraphs (f)(1) through (4) of this section to determine compliance with the emission limitations.

(1) To determine compliance with the production-based particulate matter (PM) and mercury (Hg) emission limits for ceramic tile roller kilns and sanitaryware tunnel kilns in Table 1 to this subpart, you must calculate your mass emissions per unit of production for each test run using Equation 1:

\[ MP = \frac{ER}{P} \]

(Eq. 1)

Where:
- \( MP \) = mass per unit of production, kilograms (pounds) of pollutant per megagram (ton) of throughput
- \( ER \) = mass emission rate of pollutant (PM or Hg) during each performance test run, kilograms (pounds) per hour
- \( P \) = production rate during each performance test run, megagrams (tons) of throughput per hour.

(2) To determine compliance with the PM emission limits for ceramic tile glaze lines with glaze spraying and sanitaryware glaze spray booths in Table 1 to this subpart, you must calculate your mass emissions per unit of first-fire glaze sprayed (dry weight basis) for each test run using Equation 2:

\[ MG = \frac{ER}{G} \]

(Eq. 2)

Where:
- \( MG \) = mass per unit of glaze application, kilograms (pounds) of PM per megagram (ton) of first-fire glaze sprayed (dry weight basis)
- \( ER \) = mass emission rate of PM during each performance test run, kilograms (pounds) per hour
- \( G \) = glaze application rate during each performance test run, megagrams (tons) of first-fire glaze sprayed per hour (dry weight basis).

(3) To determine compliance with the dioxin/furan emission limits for tunnel and roller kilns, ceramic tile spray dryers, and floor tile press dryers in Table 1 to this subpart, you must calculate the sum of the 2,3,7,8-tetrachlorodibenzo-p-dioxin (2,3,7,8-TCDD) toxic equivalents (TEQs) for each test run using Equation 3:

\[ \text{Total TEQ} = \sum (\text{mass of dioxin/furan}) \times \text{TEQ factor} \]

(Eq. 3)
\[
TEQ = \frac{\sum_{i=1}^{n} (M_i \times TEF_i)}{T_r \times P}
\]

Where:
\(TEQ\) = sum of the 2,3,7,8-TCDD TEQs, nanograms per kilogram of throughput processed.

\(M_i\) = mass of dioxin or furan congener \(i\) during performance test run, nanograms

\(TEF_i\) = 2,3,7,8-TCDD toxic equivalency factor (TEF) for congener \(i\), as provided in Table 5 to this subpart

\(n\) = number of congeners included in TEQ

\(T_r\) = time of performance test run, hours

\(P\) = production rate during performance test run, kilograms of throughput processed per hour.

(4) To determine compliance with the health-based standard for acid gas HAP for clay ceramics manufacturing facilities in Table 1 to this subpart, you must:

(i) Calculate the HCl-equivalent emissions for HF and HCl for each tunnel or roller kiln at your facility using Equation 4:

\[
E_i = E_{HCl}^i + \left[ E_{HF}^i \left( \frac{RfC_{HCl}}{RfC_{HF}} \right) \right]
\]

Where:
\(E_i\) = HCl-equivalent emissions for kiln \(i\), kilograms (pounds) per hour

\(E_{HCl}^i\) = emissions of HCl, kilograms (pounds) per hour

\(E_{HF}^i\) = emissions of HF, kilograms (pounds) per hour

\(RfC_{HCl}\) = reference concentration for HCl, 20 micrograms per cubic meter

\(RfC_{HF}\) = reference concentration for HF, 14 micrograms per cubic meter

(ii) If you have multiple tunnel or roller kilns at your facility, sum the HCl-equivalent values for all tunnel or roller kilns at the facility using Equation 5:

\[
E_{total} = \sum_{i=1}^{n} E_i
\]

Where:
\(E_{total}\) = HCl-equivalent emissions for total of all kilns at facility, kilograms (pounds) per hour

\(E_i\) = HCl-equivalent emissions for kiln \(i\), kilograms (pounds) per hour

\(n\) = number of tunnel kilns at facility

(iii) Compare this value to the health-based standard in Table 1 to this subpart.

(g) You must establish each site-specific operating limit in Table 2 to this subpart that applies to you as specified in paragraph (g)(1) of this section and in Table 4 to this subpart.

(1)(i) If you do not have an APCD installed on your tunnel or roller kiln, you must calculate the maximum potential HCl-equivalent emissions for HF and HCl for each tunnel or roller kiln at your facility using Equation 6:
Environmental Protection Agency § 63.8595

\[
E_{\text{max } i} = (\text{Cap}_i) \left[ (\text{MP}_{\text{HCl}_i}) + (\text{MP}_{\text{HF}_i}) \left( \frac{\text{RfC}_{\text{HCl}}}{\text{RfC}_{\text{HF}}} \right) \right] \quad (\text{Eq. 6})
\]

Where:
\( E_{\text{max } i} \) = maximum potential HCl-equivalent emissions for kiln \( i \), kilograms (pounds) per hour
\( \text{Cap}_i \) = design capacity for kiln \( i \), megagrams (tons) of throughput per hour
\( \text{MP}_{\text{HCl}_i} \) = mass of HCl per unit of production for kiln \( i \), kilograms (pounds) of HCl per megagram (ton) of throughput
\( \text{MP}_{\text{HF}_i} \) = mass of HF per unit of production for kiln \( i \), kilograms (pounds) of HF per megagram (ton) of throughput
\( \text{RfC}_{\text{HCl}} \) = reference concentration for HCl, 20 micrograms per cubic meter
\( \text{RfC}_{\text{HF}} \) = reference concentration for HF, 14 micrograms per cubic meter

(ii) If you have multiple tunnel or roller kilns at your facility, sum the maximum potential HCl-equivalent values for all tunnel or roller kilns at the facility using Equation 7:

\[
E_{\text{max total}} = \sum_{i=1}^{n} E_{\text{max } i} \quad (\text{Eq. 7})
\]

Where:
\( E_{\text{max total}} \) = maximum potential HCl-equivalent emissions for total of all kilns at facility, kilograms (pounds) per hour
\( E_{\text{max } i} \) = maximum potential HCl-equivalent emissions for kiln \( i \), kilograms (pounds) per hour
\( n \) = number of kilns at facility

(iii) If you have a single tunnel or roller kiln at your facility and the total facility maximum potential HCl-equivalent emissions (\( E_{\text{max total}} \)) are greater than the HCl-equivalent limit in Table 1 to this subpart, you must determine the maximum process rate for the kiln using Equation 8 that would ensure the total facility maximum potential HCl-equivalent emissions remain at or below the HCl-equivalent limit. The maximum process rate would become your operating limit for process rate and must be included in your OM&M plan.

\[
P_{\text{max } i} = \left( \frac{\text{HCl - eq}}{(\text{MP}_{\text{HCl}_i}) + (\text{MP}_{\text{HF}_i}) \left( \frac{\text{RfC}_{\text{HCl}}}{\text{RfC}_{\text{HF}}} \right)} \right) \quad (\text{Eq. 8})
\]

Where:
\( P_{\text{max } i} \) = maximum process rate for kiln \( i \), megagrams (tons) per hour
\( \text{HCl - eq} \) = HCl-equivalent limit in Table 1 to this subpart, 62 kilograms (140 pounds) per hour
\( \text{MP}_{\text{HCl}_i} \) = mass of HCl per unit of production for kiln \( i \), kilograms (pounds) of HCl per megagram (ton) of throughput
\( \text{MP}_{\text{HF}_i} \) = mass of HF per unit of production for kiln \( i \), kilograms (pounds) of HF per megagram (ton) of throughput
\( \text{RfC}_{\text{HCl}} \) = reference concentration for HCl, 20 micrograms per cubic meter
\( \text{RfC}_{\text{HF}} \) = reference concentration for HF, 14 micrograms per cubic meter

(iv) If you have multiple tunnel or roller kilns at your facility and the total facility maximum potential HCl-equivalent emissions (\( E_{\text{max total}} \)) are greater than the HCl-equivalent limit in Table 1 to this subpart, you must determine the combination of maximum...
process rates that would ensure that total facility maximum potential HCl-equivalent remains at or below the HCl-equivalent limit. The maximum process rates would become your operating limits for process rate and must be included in your OM&M plan.

(2) [Reserved]

(h) For each affected source that is subject to the emission limits specified in Table 1 to this subpart and is equipped with an APCD that is not addressed in Table 2 to this subpart or that is using process changes as a means of meeting the emission limits in Table 1 to this subpart, you must meet the requirements in §63.8(f) and paragraphs (h)(1) and (2) of this section.

(1) Submit a request for approval of alternative monitoring procedures to the Administrator no later than the notification of intent to conduct a performance test. The request must contain the information specified in paragraphs (h)(1)(i) through (iv) of this section.

(i) A description of the alternative APCD or process changes.

(ii) The type of monitoring device or procedure that will be used.

(iii) The operating parameters that will be monitored.

(iv) The frequency that the operating parameter values will be determined and recorded to establish continuous compliance with the operating limits.

(2) Establish site-specific operating limits during the performance test based on the information included in the approved alternative monitoring procedures request and, as applicable, as specified in Table 4 to this subpart.

§ 63.8600 What are my monitoring installation, operation, and maintenance requirements?

(a) You must install, operate, and maintain each CMS according to your OM&M plan and the requirements in paragraphs (a)(1) through (5) of this section.

(1) Conduct a performance evaluation of each CMS according to your OM&M plan.

(2) The CMS must complete a minimum of one cycle of operation for each successive 15-minute period. To have a valid hour of data, you must have at least three of four equally spaced data values (or at least 75 percent if you collect more than four data values per hour) for that hour (not including startup, shutdown, malfunction, out-of-control periods, or periods of routine control device maintenance covered by the routine control device maintenance alternative standard as specified in §63.8570(d)).

(3) Determine and record the 3-hour block averages of all recorded readings, calculated after every 3 hours of operation as the average of the previous 3 operating hours. To calculate the average for each 3-hour average period, you must have at least 75 percent of the recorded readings for that period (not including startup, shutdown, malfunction, out-of-control periods, or periods of routine control device maintenance covered by the routine control device maintenance alternative standard as specified in §63.8570(d)).

(4) Record the results of each inspection, calibration, and validation check.

(5) At all times, maintain the monitoring equipment including, but not limited to, maintaining necessary parts for routine repairs of the monitoring equipment.

(b) For each liquid flow measurement device, you must meet the requirements in paragraphs (a)(1) through (5) and paragraphs (b)(1) through (3) of this section.

(1) Locate the flow sensor in a position that provides a representative flowrate.

(2) Use a flow sensor with a minimum measurement sensitivity of 2 percent of the liquid flowrate.

(c) For each pressure measurement device, you must meet the requirements in paragraphs (a)(1) through (5) and paragraphs (c)(1) through (7) of this section.

(1) Locate the pressure sensor(s) in or as close to a position that provides a representative measurement of the pressure.

(2) Minimize or eliminate pulsating pressure, vibration, and internal and external corrosion.

(3) Use a gauge with a minimum measurement sensitivity of 0.5 inch of water or a transducer with a minimum...
measurement sensitivity of 1 percent of the pressure range.

(4) Check the pressure tap daily to ensure that it is not plugged.

(5) Using a manometer, check gauge calibration quarterly and transducer calibration monthly.

(6) Any time the sensor exceeds the manufacturer’s specified maximum operating pressure range, conduct calibration checks or install a new pressure sensor.

(7) At least monthly, inspect all components for integrity, all electrical connections for continuity, and all mechanical connections for leakage.

(d) For each pH measurement device, you must meet the requirements in paragraphs (a)(1) through (5) and paragraphs (d)(1) through (4) of this section.

(1) Locate the pH sensor in a position that provides a representative measurement of pH.

(2) Ensure the sample is properly mixed and representative of the fluid to be measured.

(3) Check the pH meter’s calibration at one point daily.

(4) At least monthly, inspect all components for integrity and all electrical connections for continuity.

(e) For each bag leak detection system, you must meet the requirements in paragraphs (e)(1) through (11) of this section.

(1) Each triboelectric bag leak detection system must be installed, calibrated, operated, and maintained according to the EPA–454/R–98–015, “Fabric Filter Bag Leak Detection Guidance,” (incorporated by reference, see §63.14). Other types of bag leak detection systems must be installed, operated, calibrated, and maintained in a manner consistent with the manufacturer’s written specifications and recommendations.

(2) The bag leak detection system must be certified by the manufacturer to be capable of detecting PM emissions at concentrations of 10 milligrams per actual cubic meter (0.0044 grains per actual cubic foot) or less.

(3) The bag leak detection system sensor must provide an output of relative PM loadings.

(4) The bag leak detection system must be equipped with a device to continuously record the output signal from the sensor.

(5) The bag leak detection system must be equipped with an audible alarm system that will sound automatically when an increase in relative PM emissions over a preset level is detected. The alarm must be located where it is easily heard by plant operating personnel.

(6) For positive pressure fabric filter systems, a bag leak detector must be installed in each baghouse compartment or cell.

(7) For negative pressure or induced air fabric filters, the bag leak detector must be installed downstream of the fabric filter.

(8) Where multiple detectors are required, the system’s instrumentation and alarm may be shared among detectors.

(9) The baseline output must be established by adjusting the range and the averaging period of the device and establishing the alarm set points and the alarm delay time according to section 5.0 of the “Fabric Filter Bag Leak Detection Guidance,” (incorporated by reference, see §63.14).

(10) Following initial adjustment of the system, the sensitivity or range, averaging period, alarm set points, or alarm delay time may not be adjusted except as detailed in your OM&M plan. In no case may the sensitivity be increased by more than 100 percent or decreased more than 50 percent over a 365-day period unless such adjustment follows a complete fabric filter inspection which demonstrates that the fabric filter is in good operating condition, as defined in section 5.2 of the “Fabric Filter Bag Leak Detection Guidance,” (incorporated by reference, see §63.14). Record each adjustment.

(11) Record the results of each inspection, calibration, and validation check.

(f) For each lime, chemical, or carbon feed rate measurement device, you must meet the requirements in paragraphs (a)(1) through (5) and paragraphs (f)(1) and (2) of this section.

(1) Locate the measurement device in a position that provides a representative feed rate measurement.

(2) At least semiannually, conduct a calibration check.
§ 63.8605 How do I demonstrate initial compliance with the emission limitations and work practice standards?

(a) You must demonstrate initial compliance with each emission limitation and work practice standard that applies to you according to Table 6 to this subpart.

(b) You must establish each site-specific operating limit in Table 2 to this subpart that applies to you according to the requirements in §§ 63.8595(h) and 63.8(f).

(c) You must submit the Notification of Compliance Status containing the results of the initial compliance demonstration according to the requirements in § 63.8630(c).

§ 63.8615 How do I monitor and collect data to demonstrate continuous compliance?

(a) You must monitor and collect data according to this section.

(b) Except for periods of 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 (or collect data at all required intervals) at all times that the affected source is operating. This includes periods of startup, shutdown, malfunction, and routine control device maintenance as specified in § 63.8570(d) when the affected source is operating.

(c) You may not use data recorded during monitoring malfunctions, associated repairs, out-of-control periods, or required quality assurance or control activities for purposes of calculating data averages. You must use all the valid data collected during all other periods in assessing compliance. Any averaging period for which you do not have valid monitoring data and such data are required constitutes a deviation from the monitoring requirements.

§ 63.8620 How do I demonstrate continuous compliance with the emission limitations and work practice standards?

(a) You must demonstrate continuous compliance with each emission limit, operating limit, and work practice standard in Tables 1, 2, and 3 to this subpart that applies to you according to the methods specified in Table 7 to this subpart.

(b) For each affected source that is subject to the emission limits specified in Table 1 to this subpart and is equipped with an APCD that is not addressed in Table 2 to this subpart, or that is using process changes as a means of meeting the emission limits in Table 1 to this subpart, you must demonstrate continuous compliance with each emission limit in Table 1 to this subpart, and each operating limit established as required in § 63.8595(h)(2) according to the methods specified in your approved alternative monitoring procedures request, as described in §§ 63.8595(h)(1) and 63.8(f).

(c) You must report each instance in which you did not meet each emission limit and operating limit in this subpart that applies to you. These instances are deviations from the emission limitations in this subpart. These deviations must be reported according to the requirements in § 63.8635(c)(8).

(d) [Reserved]

(e) You must demonstrate continuous compliance with the operating limits in Table 2 to this subpart for visible emissions (VE) from tunnel or roller kilns that are uncontrolled or equipped with DIFF, DLS/FF, or other dry control device by monitoring VE at each...
klin stack according to the requirements in paragraphs (e)(1) through (3) of this section.

(1) Perform daily VE observations of each klin stack according to the procedures of Method 22 of 40 CFR part 60, appendix A–7. You must conduct the Method 22 test while the affected source is operating under normal conditions. The duration of each Method 22 test must be at least 15 minutes.

(2) If VE are observed during any daily test conducted using Method 22 of 40 CFR part 60, appendix A–7, you must promptly initiate and complete corrective actions according to your OM&M plan. If no VE are observed in 30 consecutive daily Method 22 tests for any klin stack, you may decrease the frequency of Method 22 testing from daily to weekly for that klin stack. If VE are observed during any weekly test, you must promptly initiate and complete corrective actions according to your OM&M plan, resume Method 22 testing from daily to weekly for that klin stack. If VE are observed during any weekly test, you must promptly initiate and complete corrective actions according to your OM&M plan, resume Method 22 testing from daily to weekly for that klin stack.

(3) If VE are observed during any test conducted using Method 22 of 40 CFR part 60, appendix A–7, you must report these deviations by following the requirements in §63.8635.

NOTIFICATIONS, REPORTS, AND RECORDS

§ 63.8630 What notifications must I submit and when?

(a) You must submit all of the notifications in §63.7(b) and (c), 63.8(f)(4), and 63.9 (b) through (e), (g)(1), and (h) that apply to you, by the dates specified.

(b) You must submit all of the notifications specified in Table 9 to this subpart that apply to you, by the dates specified.

(c) If you are required to conduct a performance test or other initial compliance demonstration as specified in Tables 4 and 6 to this subpart, your Notification of Compliance Status as specified in Table 9 to this subpart must include the information in paragraphs (c)(1) through (5) of this section.

(1) The requirements in §63.9(h)(2)(i).

(2) The operating limit parameter values established for each affected source with supporting documentation and a description of the procedure used to establish the values.

(3) For each APCD that includes a fabric filter, if a bag leak detection system is used, analysis and supporting documentation demonstrating conformance with EPA guidance and specifications for bag leak detection systems in §63.8600(e).

(d) If you own or operate an affected klin that is subject to the work practice standard specified in Item 1 of Table 3 to this subpart, and you intend to use a fuel other than natural gas or equivalent to fire the affected klin, your notification of alternative fuel use must include the information specified in paragraphs (d)(1) through (5) of this section.

(1) Company name and address.

(2) Identification of the affected klin.

(3) Reason you are unable to use natural gas or equivalent fuel, including the date when the natural gas curtailment was declared or the natural gas supply interruption began.

(4) Type of alternative fuel that you intend to use.

(5) Dates when the alternative fuel use is expected to begin and end.

§ 63.8635 What reports must I submit and when?

(a) You must submit each report in Table 10 to 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 10 to this subpart and as specified in paragraphs (b)(1) through (5) of this section.

(1) The first compliance report must cover the period beginning on the compliance date that is specified for your affected source in §63.8545 and ending on either June 30 or December 31. This reporting period must be at least 6 months, but less than 12 months. For example, if your compliance date is March 1, then the first semiannual reporting period would begin on March 1 and end on December 31.

(2) The first compliance report must be postmarked or delivered no later
than July 31 or January 31 for compliance periods ending on June 30 and December 31, respectively.

(3) 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) Each subsequent compliance report must be postmarked or delivered no later than July 31 or January 31 for compliance periods ending on June 30 and December 31, respectively.

(5) For each affected source that is subject to permitting regulations pursuant to 40 CFR part 70 or 40 CFR part 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 the dates in paragraphs (b)(1) through (4) of this section.

(c) The compliance report must contain the information in paragraphs (c)(1) through (8) of this section.

(1) Company name and address.

(2) Statement by a responsible official with that official’s name, title, and signature, certifying that, based on information and belief formed after reasonable inquiry, the statements and information in the report are true, accurate, and complete.

(3) Date of report and beginning and ending dates of the reporting period.

(4) A description of control device maintenance performed while the control device was offline and the affected source controlled by the control device was operating, including the information specified in paragraphs (c)(4)(i) through (iii) of this section.

(i) The date and time when the control device was shut down and restarted.

(ii) Identification of the affected source that was operating and the number of hours that the affected source operated while the control device was offline.

(iii) A statement of whether or not the control device maintenance was included in your approved routine control device maintenance request developed as specified in §63.8570(d). If the control device maintenance was included in your approved routine control device maintenance request, then you must report the information in paragraphs (c)(4)(iii)(A) through (C) of this section.

(A) The total amount of time that the affected source controlled by the control device operated during the current semiannual compliance period and during the previous semiannual compliance period.

(B) The amount of time that each affected source controlled by the control device operated while the control device was offline for maintenance covered under the routine control device maintenance alternative standard during the current semiannual compliance period and during the previous semiannual compliance period.

(C) Based on the information recorded under paragraphs (c)(4)(iii)(A) and (B) of this section, compute the annual percent of affected source operating uptime during which the control device was offline for routine maintenance using Equation 9.

\[
RM = \frac{DT_p + DT_c}{SU_p + SU_c} (100) \tag{Eq. 9}
\]

Where:

\( RM \) = Annual percentage of affected source uptime during which control device was offline for routine control device maintenance

\( DT_p \) = Control device downtime claimed under the routine control device maintenance alternative standard for the previous semiannual compliance period

\( DT_c \) = Control device downtime claimed under the routine control device maintenance alternative standard for the current semiannual compliance period

\( SU_p \) = Affected source uptime for the previous semiannual compliance period

\( SU_c \) = Affected source uptime for the current semiannual compliance period

426
Environmental Protection Agency

§ 63.8635

SU = Affected source uptime for the current semiannual compliance period

(5) If there are no deviations from any emission limitations (emission limits or operating limits) or work practice standards that apply to you, the compliance report must contain a statement that there were no deviations from the emission limitations or work practice standards during the reporting period.

(6) If there were no periods during which the CMS was out-of-control as specified in your OM&M plan, the compliance report must contain a statement that there were no periods during which the CMS was out-of-control during the reporting period.

(7) The first compliance report must contain the startup production rate for each ceramic tile roller kiln, floor tile press dryer, ceramic tile spray dryer, and sanitaryware tunnel kiln; the minimum APCD inlet temperature for each APCD; and the temperature profile for each ceramic tile roller kiln, floor tile press dryer, ceramic tile spray dryer, and sanitaryware tunnel kiln without an APCD.

(8) For each deviation that occurs at an affected source, report such events in the compliance report by including the information in paragraphs (c)(8)(i) through (iii) of this section.

(i) The date, time, and duration of the deviation.

(ii) A list of the affected sources or equipment for which the deviation occurred.

(iii) An estimate of the quantity of each regulated pollutant emitted over any emission limit, and a description of the method used to estimate the emissions.

(d) For each deviation from an emission limitation (emission limit or operating limit) occurring at an affected source where you are using a CMS to comply with the emission limitations in this subpart, you must include the information in paragraphs (c)(1) through (d)(1) and (c)(8), and paragraphs (d)(1) through (11) of this section. This includes periods of startup, shutdown, and routine control device maintenance.

(1) The total operating time of each affected source during the reporting period.

(2) The date and time 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 pertinent information in your OM&M plan.

(4) Whether each deviation occurred during routine control device maintenance covered in your approved routine control device maintenance alternative standard or during another period, and the cause of each deviation (including unknown cause, if applicable).

(5) A description of any corrective action taken to return the affected unit to its normal or usual manner of operation.

(6) A breakdown of the total duration of the deviations during the reporting period into those that are due to startup, shutdown, 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 source operating time during that reporting period.

(8) A brief description of the process units.

(9) A brief description of the CMS.

(10) The date of the latest CMS certification or audit.

(11) A description of any changes in CMS, processes, or control equipment since the last reporting period.

(e) If you have obtained a title V operating permit according to 40 CFR part 70 or 40 CFR part 71, you 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 you submit a compliance report according to Table 8 to 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 limitation (including any operating limit), then submitting the compliance report will satisfy any obligation to report the same deviations in the semiannual monitoring report.
§ 63.8640 What records must I keep?

(a) You must keep the records listed in paragraphs (a)(1) through (3) 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 requirements in §63.10(b)(2)(xv).

(2) Records of performance tests as required in §63.10(b)(2)(viii).

(3) Records relating to control device maintenance and documentation of your approved routine control device maintenance request, if you request to use the alternative standard under §63.8570(d).

(b) You must keep the records required in Table 7 to this subpart to show continuous compliance with each emission limitation and work practice standard that applies to you.

(c) You must also maintain the records listed in paragraphs (c)(1) through (10) of this section.

(1) For each bag leak detection system, records of each alarm, the time of the alarm, the time corrective action was initiated and completed, and a brief description of the cause of the alarm and the corrective action taken.

(2) For each deviation, record the information in paragraphs (c)(2)(i) through (iv) of this section.

(i) The date, time, and duration of the deviation.
Environmental Protection Agency

§ 63.8645

(ii) A list of the affected sources or equipment.
(iii) An estimate of the quantity of each regulated pollutant emitted over any emission limit and a description of the method used to estimate the emissions.
(iv) Actions taken to minimize emissions in accordance with §63.8570(b) and any corrective actions taken to return the affected unit to its normal or usual manner of operation.
(3) For each affected source, records of production rates on a ton throughput processed basis.
(4) Records for any approved alternative monitoring or test procedures.
(5) Records of maintenance and inspections performed on the APCD.
(6) Current copies of your OM&M plan, including any revisions, with records documenting conformance.
(7) Logs of the information required in paragraphs (c)(7)(i) through (iii) of this section to document proper operation of your sanitaryware shuttle kiln.
(i) Records of the firing time and temperature cycle for each sanitaryware shuttle kiln. If all shuttle kilns use the same time and temperature cycles, one copy may be maintained for each kiln. Reference numbers must be assigned to use in log sheets.
(ii) For each sanitaryware shuttle kiln, a log that details the time and temperature protocol reference number and an indication of whether the tonnage was below the maximum tonnage for that specific kiln.
(8) Logs of the maintenance procedures used to demonstrate compliance with the maintenance requirements of the sanitaryware shuttle kiln work practice standards specified in Table 3 to this subpart.
(9) For periods of startup and shutdown, records of the following information:
(i) The date, time, and duration of each startup and/or shutdown period, recording the periods when the affected source was subject to the standard applicable to startup and shutdown.
(ii) For periods of startup, the production rate and exhaust temperature prior to the time the exhaust reaches the minimum APCD inlet temperature (for ceramic tile roller kilns, floor tile press dryers, ceramic tile spray dryers, and sanitaryware tunnel kilns with an APCD) or the temperature profile is attained (for ceramic tile roller kilns, floor tile press dryers, ceramic tile spray dryers, and sanitaryware tunnel kilns with no APCD).
(iii) For periods of shutdown, the production rate and exhaust temperature after the time the exhaust falls below the minimum APCD inlet temperature (for ceramic tile roller kilns, floor tile press dryers, ceramic tile spray dryers, and sanitaryware tunnel kilns with an APCD) or the temperature profile is no longer maintained (for ceramic tile roller kilns, floor tile press dryers, ceramic tile spray dryers, and sanitaryware tunnel kilns with no APCD).
(10) All site-specific parameters, temperature profiles, and procedures required to be established or developed according to the applicable work practice standards in Table 3 to this subpart.

§ 63.8645 In what form and for 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 onsite for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to §63.10(b)(1). You may keep the records offsite for the remaining 3 years.
§ 63.8655 Other Requirements and Information

§ 63.8655 What parts of the General Provisions apply to me?

Table 11 to this subpart shows which parts of the General Provisions in §§ 63.1 through 63.16 apply to you.

§ 63.8660 Who implements and enforces this subpart?

(a) This subpart can be implemented and enforced by us, 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, in addition to 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 if implementation and enforcement of 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 subpart E of this part, 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 cannot be delegated to state, local, or tribal agencies are as specified in paragraphs (c)(1) through (6) of this section.

(1) Approval of alternatives to the applicability requirements in §§ 63.8535 and 63.8540, the compliance date requirements in § 63.8545, and the non-opacity emission limitations in § 63.8555.

(2) Approval of major changes to test methods under §§ 63.7(e)(2)(ii) and (f) and as defined in § 63.90.

(3) Approval of major changes to monitoring under § 63.8(f) and as defined in § 63.90.

(4) Approval of major changes to recordkeeping and reporting under § 63.10(f) and as defined in § 63.90.

(5) Approval of an alternative to any electronic reporting to the EPA required by this subpart.

(6) Approval of a routine control device maintenance request under § 63.8570(d).

§ 63.8665 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:

Air pollution control device (APCD) means any equipment that reduces the quantity of a pollutant that is emitted to the air.

Bag leak detection system means an instrument that is capable of monitoring PM loadings in the exhaust of a fabric filter in order to detect bag failures. A bag leak detection system includes, but is not limited to, an instrument that operates on triboelectric, light-scattering, light-transmittance, or other effects to monitor relative PM loadings.

Clay ceramics manufacturing facility means a plant site that manufactures pressed floor tile, pressed wall tile, other pressed tile, or sanitaryware (e.g., sinks and toilets). Clay ceramics manufacturing facilities typically process clay, shale, and various additives, form the processed materials into tile or sanitaryware shapes, and dry and fire the ceramic products. Glazes are applied to many tile and sanitaryware products. A plant site that manufactures refractory products, as defined in § 63.9824, or brick and structural clay products (BSCP), as defined in § 63.8515, is not a clay ceramics manufacturing facility.

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 (including any operating limit) or work practice standard; or

(2) Fails to meet any term or condition that is adopted to implement an applicable requirement in this subpart for any affected source required to obtain such a permit.

Dioxin/furan means, for purposes of this subpart, the sum of the 2,3,7,8-TCDD toxic equivalents calculated using Equation 3 of this subpart.

Dry lime injection fabric filter (DIFF) means an APCD that includes continuous injection of hydrated lime or
Environmental Protection Agency

§ 63.8665

other sorbent into a duct or reaction chamber followed by a fabric filter.

_Dry lime scrubber/fabric filter (DLS/FF)_ means an APCD that includes continuous injection of humidified hydrated lime or other sorbent into a reaction chamber followed by a fabric filter. These systems typically include recirculation of some of the sorbent.

_Emission limitation_ means any emission limit or operating limit.

_Fabric filter_ means an APCD used to capture PM by filtering a gas stream through filter media; also known as a baghouse.

_Fired product_ means clay ceramic or sanitaryware products that have gone through the firing process via kilns.

_Glaze_ means a coating of colored, opaque, or transparent material applied to ceramic products before firing.

_Glaze line_ means a production line for glazing ceramic products, which includes glaze spraying (typically comprised of one or more glaze spray booths) and other types of glazing operations (e.g., dipping, flooding, centrifugal disc glazing, curtain coating).

_Glaze spray booth_ means a type of equipment used for spraying glaze on ceramic products.

_Glaze spray operation_ means any type of glaze application that uses glaze spraying, including glaze lines and glaze spray booths.

_Greenware_ means clay ceramic or sanitaryware products that have not gone through the firing process via kilns.

_Initial startup_ means the time at which the kiln first reaches a level of production that is equal to 75 percent of the kiln design capacity or 12 months after the affected source begins firing clay ceramics, whichever is earlier.

_Kiln design capacity_ means the maximum amount of clay ceramics, in Mg (tons), that a kiln is designed to produce in one year divided by the number of hours in a year (8,760 hours), taking into account the void space in the product, the push rate for the kiln, and the stacking pattern, if applicable. If a kiln is modified to increase the capacity, the design capacity is considered to be the capacity following modifications.

_Minimum APCD inlet temperature_ means the minimum temperature that kiln exhaust can be vented to the APCD that ensures the long-term integrity of the APCD.

_Particulate matter (PM)_ means, for purposes of this subpart, emissions of filterable PM that serve as a measure of total particulate emissions, as measured by Method 5 (40 CFR part 60, appendix A–3) or Method 29 (40 CFR part 60, appendix A–8), and as a surrogate for non-mercury metal HAP contained in the particulates including, but not limited to, antimony, arsenic, beryllium, cadmium, chromium, cobalt, lead, manganese, nickel, and selenium.

_Period of natural gas curtailment or supply interruption_ means a period of time during which the supply of natural gas to an affected facility is halted for reasons beyond the control of the facility. An increase in the cost or unit price of natural gas does not constitute a period of natural gas curtailment or supply interruption.

_Plant site_ means all contiguous or adjoining property that is under common control, including properties that are separated only by a road or other public right-of-way. Common control includes properties that are owned, leased, or operated by the same entity, parent entity, subsidiary, or any combination thereof.

_Responsibility official_ means responsible official as defined in 40 CFR 70.2.

_Roller kiln_ means a continuous kiln similar to a tunnel kiln except that the unfired ceramic product travels through the kiln in a single layer on rollers. In the clay ceramics source category, roller kilns are used at ceramic tile manufacturing plants.

_Shuttle kiln_ means a batch firing kiln that is designed with a removable superstructure that is tilted or raised using hydraulic struts to allow entrance and egress. In the clay ceramics source category, shuttle kilns are used at sanitaryware manufacturing plants.

_Spray dryer_ means a drying chamber used to form a free-flowing powder from a slurry of ceramic mix and water, to improve handling and compaction. In the clay ceramics source category, spray dryers are used at ceramic tile manufacturing plants.
For each . . .

<table>
<thead>
<tr>
<th>For each . . .</th>
<th>You must meet the following emission limits . . .</th>
</tr>
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<tbody>
<tr>
<td>1. Collection of all tunnel or roller kilns at facility.</td>
<td>HF and HCl emissions must not exceed 62 kilograms per hour (kg/hr) (140 pounds per hour (lb/hr)) HCl equivalent, under the health-based standard, as determined using Equations 4 and 5.</td>
</tr>
<tr>
<td>2. Existing floor tile roller kiln</td>
<td>a. PM emissions must not exceed 0.063 kilogram per megagram (kg/Mg) (0.13 pound per ton (lb/ton)) of fired product.</td>
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<td></td>
<td>b. Hg emissions must not exceed 6.3 E–05 kg/Mg (1.3 E–04 lb/ton) of fired product.</td>
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<tr>
<td></td>
<td>c. Dioxin/furan emissions must not exceed 2.8 nanograms per kilogram (ng/kg) of fired product.</td>
</tr>
<tr>
<td>3. Existing wall tile roller kiln</td>
<td>a. PM emissions must not exceed 0.19 kg/Mg (0.37 lb/ton) of fired product.</td>
</tr>
<tr>
<td></td>
<td>b. Hg emissions must not exceed 1.1 E–04 kg/Mg (2.1 E–04 lb/ton) of fired product.</td>
</tr>
<tr>
<td></td>
<td>c. Dioxin/furan emissions must not exceed 0.22 ng/kg of fired product.</td>
</tr>
<tr>
<td>4. Existing first-fire sanitaryware tunnel kiln.</td>
<td>a. PM emissions must not exceed 0.17 kg/Mg (0.34 lb/ton) of greenware fired.</td>
</tr>
<tr>
<td></td>
<td>b. Hg emissions must not exceed 1.3 E–04 kg/Mg (2.6 E–04 lb/ton) of greenware fired.</td>
</tr>
<tr>
<td></td>
<td>c. Dioxin/furan emissions must not exceed 3.3 ng/kg of greenware fired.</td>
</tr>
<tr>
<td>5. Existing tile glaze line with glaze spraying.</td>
<td>a. PM emissions must not exceed 0.93 kg/Mg (1.9 lb/ton) of first-fire glaze sprayed (dry weight basis).</td>
</tr>
<tr>
<td></td>
<td>b. Hg emissions must not exceed 8.0 E–05 kg/Mg (1.6 E–04 lb/ton) of first-fire glaze sprayed (dry weight basis).</td>
</tr>
<tr>
<td>6. Existing sanitaryware manual glaze application.</td>
<td>PM emissions must not exceed 16 kg/Mg (35 lb/ton) of first-fire glaze sprayed (dry weight basis).</td>
</tr>
<tr>
<td>7. Existing sanitaryware machine glaze application.</td>
<td>PM emissions must not exceed 6.2 kg/Mg (13 lb/ton) of first-fire glaze sprayed (dry weight basis).</td>
</tr>
<tr>
<td>8. Existing sanitaryware robot glaze application.</td>
<td>PM emissions must not exceed 4.5 kg/Mg (8.9 lb/ton) of first-fire glaze sprayed (dry weight basis).</td>
</tr>
<tr>
<td>9. Existing floor tile spray dryer</td>
<td>Dioxin/furan emissions must not exceed 0.058 ng/kg of throughput processed.</td>
</tr>
<tr>
<td>10. Existing wall tile spray dryer</td>
<td>Dioxin/furan emissions must not exceed 0.024 ng/kg of throughput processed.</td>
</tr>
<tr>
<td>11. Existing floor tile press dryer</td>
<td>a. PM emissions must not exceed 0.019 kg/Mg (0.037 lb/ton) of fired product.</td>
</tr>
<tr>
<td></td>
<td>b. Hg emissions must not exceed 1.3 E–04 kg/Mg (2.6 E–04 lb/ton) of fired product.</td>
</tr>
<tr>
<td>12. New or reconstructed floor tile roller kiln.</td>
<td>a. PM emissions must not exceed 0.10 kg/Mg (0.02 lb/ton) of fired product.</td>
</tr>
<tr>
<td></td>
<td>b. Hg emissions must not exceed 1.3 E–04 kg/Mg (2.6 E–04 lb/ton) of greenware fired.</td>
</tr>
<tr>
<td></td>
<td>c. Dioxin/furan emissions must not exceed 0.22 ng/kg of fired product.</td>
</tr>
<tr>
<td>13. New or reconstructed wall tile roller kiln.</td>
<td>a. PM emissions must not exceed 0.31 kg/Mg (0.61 lb/ton) of first-fire glaze sprayed (dry weight basis).</td>
</tr>
<tr>
<td></td>
<td>b. Hg emissions must not exceed 8.0 E–05 kg/Mg (1.6 E–04 lb/ton) of first-fire glaze sprayed (dry weight basis).</td>
</tr>
<tr>
<td>14. New or reconstructed first-fire sanitaryware tunnel kiln.</td>
<td>a. PM emissions must not exceed 0.048 kg/Mg (0.095 lb/ton) of greenware fired.</td>
</tr>
<tr>
<td></td>
<td>b. Hg emissions must not exceed 6.1 E–05 kg/Mg (1.3 E–04 lb/ton) of greenware fired.</td>
</tr>
<tr>
<td></td>
<td>c. Dioxin/furan emissions must not exceed 0.99 ng/kg of greenware fired.</td>
</tr>
<tr>
<td>15. New or reconstructed tile glaze line with glaze spraying.</td>
<td>a. PM emissions must not exceed 0.31 kg/Mg (0.61 lb/ton) of first-fire glaze sprayed (dry weight basis).</td>
</tr>
<tr>
<td></td>
<td>b. Hg emissions must not exceed 8.0 E–05 kg/Mg (1.6 E–04 lb/ton) of first-fire glaze sprayed (dry weight basis).</td>
</tr>
<tr>
<td>16. New or reconstructed sanitaryware manual glaze application.</td>
<td>PM emissions must not exceed 2.0 kg/Mg (3.9 lb/ton) of first-fire glaze sprayed (dry weight basis).</td>
</tr>
<tr>
<td>17. New or reconstructed sanitaryware spray machine glaze application.</td>
<td>PM emissions must not exceed 1.6 kg/Mg (3.2 lb/ton) of first-fire glaze sprayed (dry weight basis).</td>
</tr>
</tbody>
</table>
### TABLE 2 TO SUBPART KKKKK OF PART 63—OPERATING LIMITS

As stated in §63.8555, you must meet each operating limit in the following table that applies to you:

<table>
<thead>
<tr>
<th>For each . . .</th>
<th>You must . . .</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Tunnel or roller kiln equipped with a DIFF or DLS/FF.</td>
<td>a. If you use a bag leak detection system, initiate corrective action within 1 hour of a bag leak detection system alarm and complete corrective actions in accordance with your OM&amp;M plan; operate and maintain the fabric filter such that the alarm is not engaged for more than 5 percent of the total operating time in a 6-month block reporting period; or maintain no VE from the DIFF or DLS/FF stack; and</td>
</tr>
<tr>
<td></td>
<td>b. Maintain free-flowing lime in the feed hopper or silo and to the APCD at all times for continuous injection systems; maintain the feeder setting (on a per ton of throughput basis) at or above the level established during the performance test for continuous injection systems in which compliance was demonstrated.</td>
</tr>
<tr>
<td>2. Tunnel or roller kiln equipped with a WS.</td>
<td>a. Maintain the average scrubber liquid pH for each 3-hour block period at or above the average scrubber liquid pH established during the HF/HCl performance test in which compliance was demonstrated; and</td>
</tr>
<tr>
<td></td>
<td>b. Maintain the average scrubber liquid flow rate for each 3-hour block period at or above the highest average scrubber liquid flow rate established during the HF/HCl and PM performance tests in which compliance was demonstrated.</td>
</tr>
<tr>
<td>3. Tunnel or roller kiln equipped with an ACI system.</td>
<td>Maintain the average carbon flow rate for each 3-hour block period at or above the highest average carbon flow rate established during the Hg and dioxin/furan performance tests in which compliance was demonstrated.</td>
</tr>
<tr>
<td>4. Tunnel or roller kiln intending to comply with dioxin/furan emission limit without an ACI system.</td>
<td>If you intend to comply with the dioxin/furan emission limit without an ACI system, maintain the stack temperature at or below the highest 4-hour average stack temperature established during the dioxin/furan performance test in which compliance was demonstrated.</td>
</tr>
<tr>
<td>5. Tunnel or roller kiln with no add-on control.</td>
<td>a. Maintain no VE from the stack; and</td>
</tr>
<tr>
<td></td>
<td>b. Maintain the kiln process rate at or below the kiln process rate determined according to §63.8595(g)(1) if your total facility maximum potential HCl-equivalent emissions are greater than the HCl-equivalent limit in Table 1 to this subpart; and</td>
</tr>
<tr>
<td></td>
<td>c. Maintain the stack temperature at or below the highest 4-hour average stack temperature established during the dioxin/furan performance test in which compliance was demonstrated.</td>
</tr>
<tr>
<td>6. Glaze spray operation equipped with a FF.</td>
<td>If you use a bag leak detection system, initiate corrective action within 1 hour of a bag leak detection system alarm and complete corrective actions in accordance with your OM&amp;M plan; operate and maintain the fabric filter such that the alarm is not engaged for more than 5 percent of the total operating time in a 6-month block reporting period; or maintain no VE from the FF stack; and</td>
</tr>
<tr>
<td>7. Glaze spray operation equipped with a WS.</td>
<td>a. Maintain the average scrubber pressure drop for each 3-hour block period at or above the average pressure drop established during the PM performance test in which compliance was demonstrated; and</td>
</tr>
<tr>
<td></td>
<td>b. Maintain the average scrubber liquid flow rate for each 3-hour block period at or above the average scrubber liquid flow rate established during the PM performance test in which compliance was demonstrated.</td>
</tr>
<tr>
<td>8. Glaze spray operation equipped with a water curtain.</td>
<td>Conduct daily inspections to verify the presence of water flow to the wet control system; and Conduct weekly visual inspections of the system ductwork and control equipment for leaks; and</td>
</tr>
<tr>
<td></td>
<td>Conduct annual inspections of the interior of the control equipment (if applicable) to determine the structural integrity and condition of the control equipment.</td>
</tr>
<tr>
<td>9. Glaze spray operation equipped with baffles.</td>
<td>Conduct an annual visual inspection of the baffles to confirm the baffles are in place.</td>
</tr>
<tr>
<td>10. Spray dryer</td>
<td>Maintain the average operating temperature for each 3-hour block period at or above the average temperature established during the dioxin/furan performance test in which compliance was demonstrated.</td>
</tr>
<tr>
<td>11. Floor tile press dryer</td>
<td>Maintain the average operating temperature for each 3-hour block period at or above the average temperature established during the dioxin/furan performance test in which compliance was demonstrated.</td>
</tr>
</tbody>
</table>
**TABLE 3 TO SUBPART KKKKK OF PART 63—WORK PRACTICE STANDARDS**

As stated in §63.8555, you must comply with each work practice standard in the following table that applies to you:

<table>
<thead>
<tr>
<th>For each . . .</th>
<th>You must . . .</th>
<th>According to one of the following requirements . . .</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Existing, new, or reconstructed sanitaryware shuttle kiln.</td>
<td>a. Minimize HAP emissions . . .</td>
<td>i. Use natural gas, or equivalent, as the kiln fuel, except during periods of natural gas curtailment or supply interruption, as defined in §63.8665; and ii. Develop and use a designed firing time and temperature cycle for each sanitaryware shuttle kiln. You must either program the time and temperature cycle into your kiln or track each step on a log sheet; and iii. Label each sanitaryware shuttle kiln with the maximum load (in tons) of greenware that can be fired in the kiln during a single firing cycle; and iv. For each firing load, document the total tonnage of greenware placed in the kiln to ensure that it is not greater than the maximum load identified in item 1.a.iii; and v. Develop and follow maintenance procedures for each kiln that, at a minimum, specify the frequency of inspection and maintenance of temperature monitoring devices, controls that regulate air-to-fuel ratios, and controls that regulate firing cycles; and vi. Develop and maintain records for each sanitaryware shuttle kiln, as specified in §63.8640.</td>
</tr>
<tr>
<td>2. Existing, new or reconstructed ceramic tile roller kiln, sanitaryware tunnel kiln, floor tile press dryer or ceramic tile spray dryer during periods of startup.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Existing, new or reconstructed ceramic tile roller kiln, sanitaryware tunnel kiln, floor tile press dryer or ceramic tile spray dryer during periods of shutdown.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Existing, new or reconstructed ceramic tile roller kiln, sanitaryware tunnel kiln, floor tile press dryer or ceramic tile spray dryer during periods of routine control device maintenance.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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

As stated in §63.8595, you must conduct each performance test in the following table that applies to you:

<table>
<thead>
<tr>
<th>For each . . .</th>
<th>You must . . .</th>
<th>According to the following requirements . . .</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Tunnel or roller kiln . . .</td>
<td>a. Select locations of sampling ports and the number of traverse points.</td>
<td>Method 1 or 1A of 40 CFR part 60, appendix A–1. Sampling sites must be located at the outlet of the APCD and prior to any releases to the atmosphere for all affected sources.</td>
</tr>
<tr>
<td>For each . . .</td>
<td>You must . . .</td>
<td>Using . . .</td>
</tr>
<tr>
<td>--------------</td>
<td>----------------</td>
<td>-------------</td>
</tr>
<tr>
<td>c. Conduct gas molecular weight analysis.</td>
<td>Method 3 of 40 CFR part 60, appendix A–2.</td>
<td>You may use Method 3A or 3B of 40 CFR part 60, appendix A–2, as appropriate, as an alternative to using Method 3 of 40 CFR part 60, appendix A–2. ANSI/ASME PTC 19.10–1981 (incorporated by reference, see §63.14) may be used as an alternative to the manual procedures (but not the instrumental procedures) in Methods 3A and 3B.</td>
</tr>
<tr>
<td>d. Measure moisture content of the stack gas.</td>
<td>Method 4 of 40 CFR part 60, appendix A–3.</td>
<td>You may use Method 26 of 40 CFR part 60, appendix A–8, as an alternative to using Method 26A of 40 CFR part 60, appendix A–8, when no acid PM (e.g., HF or HCl dissolved in water droplets emitted by sources controlled by a WS) is present. ASTM D6735–01 (Reapproved 2009) (incorporated by reference, see §63.14) may be used as an alternative to Methods 26 and 26A.</td>
</tr>
<tr>
<td>e. Measure HF and HCl emissions.</td>
<td>i. Method 26A of 40 CFR part 60, appendix A–8; or. ii. Method 320 of appendix A of this part.</td>
<td>When using Method 320 of appendix A of this part, you must follow the analyte spiking procedures of section 13 of Method 320 of appendix A of this part, unless you can demonstrate that the complete spiking procedure has been conducted at a similar source. ASTM D6348–03 (Reapproved 2010) (incorporated by reference, see §63.14) may be used as an alternative to Method 320 if the test plan preparation and implementation in Annexes A1–A8 are mandatory and the %R in Annex A5 is determined for each target analyte. ASTM D6784–02 (Reapproved 2008) (incorporated by reference, see §63.14) may be used as an alternative to Method 29 (portion for Hg only).</td>
</tr>
<tr>
<td>g. Measure Hg emissions.</td>
<td>Method 29 of 40 CFR part 60, appendix A–8.</td>
<td></td>
</tr>
<tr>
<td>h. Measure dioxin/furan emissions.</td>
<td>Method 23 of 40 CFR part 60, appendix A–7.</td>
<td>Sampling sites must be located at the outlet of the APCD and prior to any releases to the atmosphere for all affected sources.</td>
</tr>
<tr>
<td>2. Glaze spray operation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. Select locations of sampling ports and the number of traverse points.</td>
<td>Method 1 or 1A of 40 CFR part 60, appendix A–1.</td>
<td>You may use Method 2A, 2C, 2D, or 2F of 40 CFR part 60, appendix A–1, or Method 2G of 40 CFR part 60, appendix A–2, as appropriate, as an alternative to using Method 2 of 40 CFR part 60, appendix A–1.</td>
</tr>
<tr>
<td>b. Determine velocities and volumetric flow rate.</td>
<td>Method 2 of 40 CFR part 60, appendix A–1.</td>
<td>You may use Method 3A or 3B of 40 CFR part 60, appendix A–2, as appropriate, as an alternative to using Method 3 of 40 CFR part 60, appendix A–2. ANSI/ASME PTC 19.10–1981 (incorporated by reference, see §63.14) may be used as an alternative to the manual procedures (but not the instrumental procedures) in Methods 3A and 3B.</td>
</tr>
</tbody>
</table>
### Pt. 63, Subpt. KK, Table 4

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Method</th>
<th>According to the following requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>For each . . .</strong> You must . . . Using . . .**</td>
<td>e. Measure PM emissions.</td>
<td>Method 5 of 40 CFR part 60, appendix A–3.</td>
</tr>
<tr>
<td></td>
<td>f. Measure Hg emissions (tile glaze spray operations only).</td>
<td>Method 29 of 40 CFR part 60, appendix A–8.</td>
</tr>
<tr>
<td></td>
<td>a. Measure moisture content of the stack gas.</td>
<td>ASTM D6784–02 (Reapproved 2008) (incorporated by reference, see § 63.14) may be used as an alternative to Method 29 (portion for Hg only).</td>
</tr>
<tr>
<td></td>
<td>b. Measure dioxin/furan emissions.</td>
<td>Sampling sites must be located at the outlet of the APCD and prior to any releases to the atmosphere for all affected sources.</td>
</tr>
<tr>
<td></td>
<td>c. Conduct gas molecular weight analysis.</td>
<td>You may use Method 2A, 2C, 2D, or 2F of 40 CFR part 60, appendix A–1, or Method 2G of 40 CFR part 60, appendix A–2, as appropriate, as an alternative to using Method 2 of 40 CFR part 60, appendix A–1.</td>
</tr>
<tr>
<td></td>
<td>d. Measure PM emissions.</td>
<td>ANSI/ASME PTC 19.10–1981 (incorporated by reference, see § 63.14) may be used as an alternative to the manual procedures (but not the instrumental procedures) in Methods 3A and 3B.</td>
</tr>
<tr>
<td></td>
<td>f. Measure Hg emissions (tile glaze spray operations only).</td>
<td>You may use Method 2A, 2C, 2D, or 2F of 40 CFR part 60, appendix A–1, or Method 2G of 40 CFR part 60, appendix A–2, as appropriate, as an alternative to using Method 2 of 40 CFR part 60, appendix A–1.</td>
</tr>
<tr>
<td>3. Spray dryer or floor tile press dryer.</td>
<td>Method 1 or 1A of 40 CFR part 60, appendix A–1.</td>
<td>The HCl-equivalent limit in Table 1 to this subpart and emissions and production data from the HF/HCl/Cl₂ performance test.</td>
</tr>
<tr>
<td></td>
<td>Method 2 of 40 CFR part 60, appendix A–1.</td>
<td>You must continuously measure the stack temperature and determine and record the temperature values for the three test runs. The highest 4-hour average stack temperature of the three test runs establishes your maximum site-specific stack temperature operating limit.</td>
</tr>
<tr>
<td></td>
<td>Method 3 of 40 CFR part 60, appendix A–2.</td>
<td>You must continuously measure the stack temperature and determine and record the temperature values for the three test runs. The highest 4-hour average stack temperature of the three test runs establishes your maximum site-specific stack temperature operating limit.</td>
</tr>
<tr>
<td></td>
<td>Method 4 of 40 CFR part 60, appendix A–3.</td>
<td>You must continuously measure the stack temperature and determine and record the temperature values for the three test runs. The highest 4-hour average stack temperature of the three test runs establishes your maximum site-specific stack temperature operating limit.</td>
</tr>
<tr>
<td></td>
<td>Method 23 of 40 CFR part 60, appendix A–7.</td>
<td>You must continuously measure the stack temperature and determine and record the temperature values for the three test runs. The highest 4-hour average stack temperature of the three test runs establishes your maximum site-specific stack temperature operating limit.</td>
</tr>
<tr>
<td>4. Tunnel or roller kiln with no add-on control.</td>
<td>Method 1 or 1A of 40 CFR part 60, appendix A–1.</td>
<td>Using the procedures in §63.8595(g)(1), you must determine the maximum process rate(s) for your kiln(s) that would ensure total facility maximum potential HCl-equivalent emissions remain at or below the HCl-equivalent limit in Table 1 to this subpart. The maximum process rate(s) would become your site-specific process rate operating limit(s).</td>
</tr>
<tr>
<td></td>
<td>Method 2 of 40 CFR part 60, appendix A–1.</td>
<td>You must continuously measure the stack temperature and determine and record the temperature values for the three test runs. The highest 4-hour average stack temperature of the three test runs establishes your maximum site-specific stack temperature operating limit.</td>
</tr>
<tr>
<td></td>
<td>Method 3 of 40 CFR part 60, appendix A–2.</td>
<td>You must continuously measure the stack temperature and determine and record the temperature values for the three test runs. The highest 4-hour average stack temperature of the three test runs establishes your maximum site-specific stack temperature operating limit.</td>
</tr>
<tr>
<td></td>
<td>Method 4 of 40 CFR part 60, appendix A–3.</td>
<td>You must continuously measure the stack temperature and determine and record the temperature values for the three test runs. The highest 4-hour average stack temperature of the three test runs establishes your maximum site-specific stack temperature operating limit.</td>
</tr>
<tr>
<td></td>
<td>Method 23 of 40 CFR part 60, appendix A–7.</td>
<td>You must continuously measure the stack temperature and determine and record the temperature values for the three test runs. The highest 4-hour average stack temperature of the three test runs establishes your maximum site-specific stack temperature operating limit.</td>
</tr>
<tr>
<td>5. Tunnel or roller kiln that is complying with PM and/or Hg production-based emission limits.</td>
<td>HCl-equivalent limit in Table 1 to this subpart and emissions and production data from the HF/HCl/Cl₂ performance test.</td>
<td>You must measure and record the production rate, on a ton of throughput processed basis, of the affected kiln for each of the three test runs.</td>
</tr>
<tr>
<td></td>
<td>Production data collected during the PM/Hg performance tests (e.g., the number of ceramic pieces and weight per piece in the kiln during a test run divided by the amount of time to fire a piece).</td>
<td>You must measure and record the production rate, on a ton of throughput processed basis, of the affected kiln for each of the three test runs.</td>
</tr>
<tr>
<td></td>
<td>Establish the operating limit for the lime feeder setting.</td>
<td>For continuous lime injection systems, you must ensure that lime in the feed hopper or silo and to the APCD is free-flowing at all times during the performance test and record the feeder setting, on a per ton of throughput basis, for the three test runs. If the feed rate setting varies during the three test runs, determine and record the average feed rate from the three test runs. The average of the three test runs establishes your minimum site-specific feed rate operating limit.</td>
</tr>
<tr>
<td>6. Tunnel or roller kiln equipped with a DIFF or DLS/FF.</td>
<td>Establish the operating limit for the lime feeder setting.</td>
<td>For continuous lime injection systems, you must ensure that lime in the feed hopper or silo and to the APCD is free-flowing at all times during the performance test and record the feeder setting, on a per ton of throughput basis, for the three test runs. If the feed rate setting varies during the three test runs, determine and record the average feed rate from the three test runs. The average of the three test runs establishes your minimum site-specific feed rate operating limit.</td>
</tr>
</tbody>
</table>
### Environmental Protection Agency

**Pt. 63, Subpt. KKKKK, Table 4**

<table>
<thead>
<tr>
<th>For each . . .</th>
<th>You must . . .</th>
<th>Using . . .</th>
<th>According to the following requirements . . .</th>
</tr>
</thead>
<tbody>
<tr>
<td>7. Tunnel or roller kiln equipped with a WS.</td>
<td>a. Establish the operating limit for the average scrubber liquid pH.</td>
<td>Data from the pH measurement device during the HF/HCl performance test.</td>
<td>You must continuously measure the scrubber liquid pH, determine and record the block average pH values for the three test runs, and determine and record the 3-hour block average of the recorded pH measurements for the three test runs. The average of the three test runs establishes your minimum site-specific liquid pH operating limit.</td>
</tr>
<tr>
<td></td>
<td>b. Establish the operating limit for the average scrubber liquid flow rate.</td>
<td>Data from the flow rate measurement device during the HF/HCl and PM performance tests.</td>
<td>You must continuously measure the scrubber liquid flow rate, determine and record the block average flow rate values for the three test runs, and determine and record the 3-hour block average of the recorded flow rate measurements for the three test runs. The average of the three test runs establishes your minimum site-specific liquid flow rate operating limit.</td>
</tr>
<tr>
<td>8. Tunnel or roller kiln equipped with an ACI system.</td>
<td>Establish the operating limit for the average carbon flow rate.</td>
<td>Data from the carbon flow rate measurement device conducted during the Hg performance test.</td>
<td>You must measure the carbon flow rate during each test run, determine and record the block average carbon flow rate values for the three test runs, and determine and record the 3-hour block average of the recorded carbon flow rate measurements for the three test runs. The average of the three test runs establishes your minimum site-specific activated carbon flow rate operating limit.</td>
</tr>
<tr>
<td>9. Tunnel or roller kiln intending to comply with dioxin/furan emission limit without an ACI system.</td>
<td>Establish the stack temperature operating limit.</td>
<td>Data from the temperature measurement device during the dioxin/furan performance test.</td>
<td>You must continuously measure the stack temperature and determine and record the temperature values for the three test runs. The highest 4-hour average stack temperature of the three test runs establishes your maximum site-specific stack temperature operating limit.</td>
</tr>
<tr>
<td>10. Glaze spray operation equipped with a WS.</td>
<td>a. Establish the operating limit for the average scrubber pressure drop.</td>
<td>Data from the pressure drop measurement device during the PM performance test.</td>
<td>You must continuously measure the scrubber pressure drop, determine and record the block average pressure drop values for the three test runs, and determine and record the 3-hour block average of the recorded pressure drop measurements for the three test runs. The average of the three test runs establishes your minimum site-specific pressure drop operating limit.</td>
</tr>
<tr>
<td></td>
<td>b. Establish the operating limit for the average scrubber liquid flow rate.</td>
<td>Data from the flow rate measurement device during the PM performance test.</td>
<td>You must continuously measure the scrubber liquid flow rate, determine and record the block average flow rate values for the three test runs, and determine and record the 3-hour block average of the recorded flow rate measurements for the three test runs. The average of the three test runs establishes your minimum site-specific liquid flow rate operating limit.</td>
</tr>
<tr>
<td>11. Spray dryer</td>
<td>Establish the operating limit for operating temperature.</td>
<td>Data from the temperature measurement device during the dioxin/furan performance test.</td>
<td>You must continuously measure the operating temperature, determine and record the block average temperature values for the three test runs, and determine and record the 3-hour block average of the recorded temperature measurements for the three test runs. The average of the three test runs establishes your minimum site-specific operating limit.</td>
</tr>
<tr>
<td>12. Floor tile press dryer</td>
<td>Establish the operating limit for operating temperature.</td>
<td>Data from the temperature measurement device during the dioxin/furan performance test.</td>
<td>You must continuously measure the operating temperature, determine and record the block average temperature values for the three test runs, and determine and record the 3-hour block average of the recorded temperature measurements for the three test runs. The average of the three test runs establishes your minimum site-specific operating limit.</td>
</tr>
</tbody>
</table>
As stated in §63.8595(f)(3), you must demonstrate initial compliance with each dioxin/furan emission limit that applies to you by calculating the sum of the 2,3,7,8-TCDD TEQs using the TEFs in the following table:

<table>
<thead>
<tr>
<th>Dioxin/furan Congener</th>
<th>TEF</th>
</tr>
</thead>
<tbody>
<tr>
<td>2,3,7,8-tetrachlorodibenzop-dioxin</td>
<td>1</td>
</tr>
<tr>
<td>1,2,3,7,8-pentachlorodibenzop-dioxin</td>
<td>1</td>
</tr>
<tr>
<td>1,2,3,4,7,8-hexachlorodibenzop-dioxin</td>
<td>0.1</td>
</tr>
<tr>
<td>1,2,3,6,7,8-hexachlorodibenzop-dioxin</td>
<td>0.1</td>
</tr>
<tr>
<td>1,2,3,4,6,7,8-heptachlorodibenzop-dioxin</td>
<td>0.01</td>
</tr>
<tr>
<td>Octachlorodibenzop-dioxin</td>
<td>0.0003</td>
</tr>
<tr>
<td>2,3,7,8-tetrachlorodibenzofuran</td>
<td>0.1</td>
</tr>
<tr>
<td>1,2,3,7,8-pentachlorodibenzofuran</td>
<td>0.03</td>
</tr>
<tr>
<td>1,2,3,4,7,8-hexachlorodibenzofuran</td>
<td>0.3</td>
</tr>
<tr>
<td>1,2,3,6,7,8-hexachlorodibenzofuran</td>
<td>0.1</td>
</tr>
<tr>
<td>1,2,3,7,8,9-hexachlorodibenzofuran</td>
<td>0.1</td>
</tr>
<tr>
<td>1,2,3,4,6,7,8-heptachlorodibenzofuran</td>
<td>0.01</td>
</tr>
<tr>
<td>1,2,3,4,7,8,9-heptachlorodibenzofuran</td>
<td>0.01</td>
</tr>
<tr>
<td>Octachlorodibenzofuran</td>
<td>0.0003</td>
</tr>
</tbody>
</table>

As stated in §63.8605, you must demonstrate initial compliance with each emission limitation and work practice standard that applies to you according to the following table:

<table>
<thead>
<tr>
<th>For each . . .</th>
<th>For the following . . .</th>
<th>You have demonstrated initial compliance if . . .</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Collection of all tunnel or roller kilns at the facility.</td>
<td>a. HF, HCl, and Cl₂ emissions must not exceed 62 kg/hr (140 lb/hr) HCl equivalent.</td>
<td>i. You measure HF and HCl emissions for each kiln using Method 26 or 26A of 40 CFR part 60, appendix A–8 or its alternative, ASTM D6735–01 (Reapproved 2009) (incorporated by reference, see §63.14); or Method 320 of appendix A of this part or its alternative, ASTM D6348–03 (Reapproved 2010) (incorporated by reference, see §63.14); and ii. You calculate the HCl-equivalent emissions for HF for each kiln using Equation 4 to this subpart; and iii. You sum the HCl-equivalent values for all kilns at the facility using Equation 5 to this subpart; and iv. The facility total HCl-equivalent does not exceed 62 kg/hr (140 lb/hr).</td>
</tr>
<tr>
<td>2. Existing floor tile roller kiln</td>
<td>a. PM emissions must not exceed 0.063 kg/Mg (0.13 lb/ton) of fired product.</td>
<td>i. The PM emissions measured using Method 5 of 40 CFR part 60, appendix A–3 or Method 29 of 40 CFR part 60, appendix A–8, over the period of the initial performance test, according to the calculations in §63.8595(f)(1), do not exceed 0.063 kg/Mg (0.13 lb/ton) of fired product; and ii. You establish and have a record of the applicable operating limits listed in Table 2 to this subpart over the 3-hour performance test during which PM emissions did not exceed 6.3 E–05 kg/Mg (1.3 E–04 lb/ton) of fired product.</td>
</tr>
<tr>
<td></td>
<td>b. Hg emissions must not exceed 6.3 E–05 kg/Mg (1.3 E–04 lb/ton) of fired product.</td>
<td>i. The Hg emissions measured using Method 29 of 40 CFR part 60, appendix A–8 or its alternative, ASTM D6784–02 (Reapproved 2008) (incorporated by reference, see §63.14), over the period of the initial performance test, do not exceed 6.3 E–05 kg/Mg (1.3 E–04 lb/ton) of fired product; and ii. You establish and have a record of the operating limits listed in Table 2 to this subpart over the 3-hour performance test during which Hg emissions did not exceed 6.3 E–05 kg/Mg (1.3 E–04 lb/ton) of fired product.</td>
</tr>
<tr>
<td></td>
<td>c. Dioxin/furan emissions must not exceed 2.8 ng/kg of fired product.</td>
<td>i. The dioxin/furan emissions measured using Method 23 of 40 CFR part 60, appendix A–7, over the period of the initial performance test, do not exceed 2.8 ng/kg of fired product; and</td>
</tr>
</tbody>
</table>
For each . . . For the following . . . You have demonstrated initial compliance if . . .

3. Existing wall tile roller kiln . . .
   a. PM emissions must not exceed 0.19 kg/Mg (0.37 lb/ton) of fired product.
   i. You establish and have a record of the operating limits listed in Table 2 to this subpart over the 3-hour performance test during which dioxin/furan emissions did not exceed 2.8 ng/kg of fired product.
   ii. You establish and have a record of the operating limits listed in Table 2 to this subpart over the 3-hour performance test during which PM emissions did not exceed 0.19 kg/Mg (0.37 lb/ton) of fired product.

   b. Hg emissions must not exceed 1.1 E–04 kg/Mg (2.1 E–04 lb/ton) of fired product.
   i. The Hg emissions measured using Method 29 of 40 CFR part 60, appendix A–8 or its alternative, ASTM D6784–02 (Reapproved 2008) (incorporated by reference, see § 63.14), over the period of the initial performance test, do not exceed 1.1 E–04 kg/Mg (2.1 E–04 lb/ton) of fired product; and
   ii. You establish and have a record of the operating limits listed in Table 2 to this subpart over the 3-hour performance test during which Hg emissions did not exceed 1.1 E–04 kg/Mg (2.1 E–04 lb/ton) of fired product.

   c. Dioxin/furan emissions must not exceed 0.22 ng/kg of fired product.
   i. The dioxin/furan emissions measured using Method 23 of 40 CFR part 60, appendix A–7, over the period of the initial performance test, do not exceed 0.22 ng/kg of fired product; and
   ii. You establish and have a record of the operating limits listed in Table 2 to this subpart over the 3-hour performance test during which dioxin/furan emissions did not exceed 0.22 ng/kg of fired product.

4. Existing first-fire sanitaryware tunnel kiln.
   a. PM emissions must not exceed 0.17 kg/Mg (0.34 lb/ton) of greenware fired.
   i. The PM emissions measured using Method 5 of 40 CFR part 60, appendix A–3 or Method 29 of 40 CFR part 60, appendix A–8, over the period of the initial performance test, according to the calculations in § 63.8595(f)(1), do not exceed 0.17 kg/Mg (0.34 lb/ton) of greenware fired; and
   ii. You establish and have a record of the operating limits listed in Table 2 to this subpart over the 3-hour performance test during which PM emissions did not exceed 0.17 kg/Mg (0.34 lb/ton) of greenware fired.

   b. Hg emissions must not exceed 1.3 E–04 kg/Mg (2.6 E–04 lb/ton) of greenware fired.
   i. The Hg emissions measured using Method 29 of 40 CFR part 60, appendix A–8 or its alternative, ASTM D6784–02 (Reapproved 2008) (incorporated by reference, see § 63.14), over the period of the initial performance test, do not exceed 1.3 E–04 kg/Mg (2.6 E–04 lb/ton) of greenware fired; and
   ii. You establish and have a record of the operating limits listed in Table 2 to this subpart over the 3-hour performance test during which Hg emissions did not exceed 1.3 E–04 kg/Mg (2.6 E–04 lb/ton) of greenware fired.

   c. Dioxin/furan emissions must not exceed 3.3 ng/kg of greenware fired.
   i. The dioxin/furan emissions measured using Method 23 of 40 CFR part 60, appendix A–7, over the period of the initial performance test, do not exceed 3.3 ng/kg of greenware fired; and
   ii. You establish and have a record of the operating limits listed in Table 2 to this subpart over the 3-hour performance test during which dioxin/furan emissions did not exceed 3.3 ng/kg of greenware fired.

5. Existing tile glaze line with glaze spraying.
   a. PM emissions must not exceed 0.93 kg/Mg (1.9 lb/ton) of first-fire glaze sprayed (dry weight basis).
   i. The PM emissions measured using Method 5 of 40 CFR part 60, appendix A–3, over the period of the initial performance test, according to the calculations in § 63.8595(f)(2), do not exceed 0.93 kg/Mg (1.9 lb/ton) of first-fire glaze sprayed (dry weight basis); and
   ii. You establish and have a record of the operating limits listed in Table 2 to this subpart over the 3-hour performance test during which PM emissions did not exceed 0.93 kg/Mg (1.9 lb/ton) of first-fire glaze sprayed (dry weight basis).

   b. Hg emissions must not exceed 8.0 E–05 kg/Mg (1.6 E–04 lb/ton) of first-fire glaze sprayed (dry weight basis).
   i. The Hg emissions measured using Method 29 of 40 CFR part 60, appendix A–8 or its alternative, ASTM D6784–02 (Reapproved 2008) (incorporated by reference, see § 63.14), over the period of the initial performance test, do not exceed 8.0 E–05 kg/Mg (1.6 E–04 lb/ton) of first-fire glaze sprayed (dry weight basis); and
<table>
<thead>
<tr>
<th>For each . . .</th>
<th>For the following . . .</th>
<th>You have demonstrated initial compliance if . . .</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>6. Existing sanitaryware manual glaze application.</strong></td>
<td>a. PM emissions must not exceed 18 kg/Mg (35 lb/ton) of first-fire glaze sprayed (dry weight basis).</td>
<td>ii. You establish and have a record of the operating limits listed in Table 2 to this subpart over the 3-hour performance test during which Hg emissions did not exceed 8.0 E–05 kg/Mg (1.6 E–04 lb/ton) of first-fire glaze sprayed (dry weight basis).</td>
</tr>
<tr>
<td><strong>7. Existing sanitaryware spray machine glaze application.</strong></td>
<td>a. PM emissions must not exceed 6.2 kg/Mg (13 lb/ton) of first-fire glaze sprayed (dry weight basis).</td>
<td>i. The PM emissions measured using Method 5 of 40 CFR part 60, appendix A–3, over the period of the initial performance test, according to the calculations in §63.8595(f)(2), do not exceed 18 kg/Mg (35 lb/ton) of first-fire glaze sprayed (dry weight basis); and ii. You establish and have a record of the operating limits listed in Table 2 to this subpart over the 3-hour performance test during which PM emissions did not exceed 18 kg/Mg (35 lb/ton) of first-fire glaze sprayed (dry weight basis); and</td>
</tr>
<tr>
<td><strong>8. Existing sanitaryware robot glaze application.</strong></td>
<td>a. PM emissions must not exceed 4.5 kg/Mg (8.9 lb/ton) of first-fire glaze sprayed (dry weight basis).</td>
<td>i. The PM emissions measured using Method 5 of 40 CFR part 60, appendix A–3, over the period of the initial performance test, according to the calculations in §63.8595(f)(2), do not exceed 4.5 kg/Mg (8.9 lb/ton) of first-fire glaze sprayed (dry weight basis); and ii. You establish and have a record of the operating limits listed in Table 2 to this subpart over the 3-hour performance test during which PM emissions did not exceed 4.5 kg/Mg (8.9 lb/ton) of first-fire glaze sprayed (dry weight basis).</td>
</tr>
<tr>
<td><strong>9. Existing floor tile spray dryer.</strong></td>
<td>a. Dioxin/furan emissions must not exceed 19 ng/kg of throughput processed.</td>
<td>i. The dioxin/furan emissions measured using Method 23 of 40 CFR part 60, appendix A–7, over the period of the initial performance test, do not exceed 19 ng/kg of throughput processed; and ii. You establish and have a record of the operating limits listed in Table 2 to this subpart over the 3-hour performance test during which dioxin/furan emissions did not exceed 19 ng/kg of throughput processed.</td>
</tr>
<tr>
<td><strong>10. Existing wall tile spray dryer.</strong></td>
<td>a. Dioxin/furan emissions must not exceed 0.058 ng/kg of throughput processed.</td>
<td>i. The dioxin/furan emissions measured using Method 23 of 40 CFR part 60, appendix A–7, over the period of the initial performance test, do not exceed 0.058 ng/kg of throughput processed; and ii. You establish and have a record of the operating limits listed in Table 2 to this subpart over the 3-hour performance test during which dioxin/furan emissions did not exceed 0.058 ng/kg of throughput processed.</td>
</tr>
<tr>
<td><strong>11. Existing floor tile press dryer.</strong></td>
<td>a. Dioxin/furan emissions must not exceed 0.024 ng/kg of throughput processed.</td>
<td>i. The dioxin/furan emissions measured using Method 23 of 40 CFR part 60, appendix A–7, over the period of the initial performance test, do not exceed 0.024 ng/kg of throughput processed; and ii. You establish and have a record of the operating limits listed in Table 2 to this subpart over the 3-hour performance test during which dioxin/furan emissions did not exceed 0.024 ng/kg of throughput processed.</td>
</tr>
<tr>
<td><strong>12. New or reconstructed floor tile roller kiln.</strong></td>
<td>a. PM emissions must not exceed 0.019 kg/Mg (0.037 lb/ton) of fired product.</td>
<td>i. The PM emissions measured using Method 5 of 40 CFR part 60, appendix A–3 or Method 29 of 40 CFR part 60, appendix A–8, over the period of the initial performance test, according to the calculations in §63.8595(f)(1), do not exceed 0.019 kg/Mg (0.037 lb/ton) of fired product; and ii. You establish and have a record of the operating limits listed in Table 2 to this subpart over the 3-hour performance test during which PM emissions did not exceed 0.019 kg/Mg (0.037 lb/ton) of first-fire glaze sprayed (dry weight basis).</td>
</tr>
</tbody>
</table>
| | b. Hg emissions must not exceed 2.0 E–05 kg/Mg (3.9 E–05 lb/ton) of fired product. | i. The Hg emissions measured using Method 28 of 40 CFR part 60, appendix A–8 or its alternative, ASTM D6784–02 (Reapproved 2008) (incorporated by reference, see §63.14), over the period of the initial performance test, do not exceed 2.0 E–05 kg/Mg (3.9 E–05 lb/ton) of fired product; and
<table>
<thead>
<tr>
<th>13. New or reconstructed wall tile roller kiln.</th>
<th>14. New or reconstructed first-fire sanitaryware tunnel kiln.</th>
<th>15. New or reconstructed tile glaze line with glaze spraying.</th>
</tr>
</thead>
<tbody>
<tr>
<td>For each...</td>
<td>For the following...</td>
<td>You have demonstrated initial compliance if...</td>
</tr>
<tr>
<td>c. Dioxin/furan emissions must not exceed 1.3 ng/kg of fired product.</td>
<td>c. Dioxin/furan emissions must not exceed 1.3 ng/kg of fired product.</td>
<td>a. PM emissions must not exceed 0.31 kg/Mg (0.61 lb/ton) of first-fire glaze sprayed (dry weight basis).</td>
</tr>
<tr>
<td>i. You establish and have a record of the operating limits listed in Table 2 to this subpart over the 3-hour performance test during which Hg emissions did not exceed 2.0 E–05 kg/Mg (3.9 E–05 lb/ton) of fired product.</td>
<td>i. The dioxin/furan emissions measured using Method 23 of 40 CFR part 60, appendix A–7, over the period of the initial performance test, do not exceed 1.3 ng/kg of fired product; and</td>
<td>i. The PM emissions measured using Method 5 of 40 CFR part 60, appendix A–3 or Method 29 of 40 CFR part 60, appendix A–8, over the period of the initial performance test during which Hg emissions did not exceed 6.1 E–05 kg/Mg (1.3 E–04 lb/ton) of greenware fired; and</td>
</tr>
<tr>
<td>ii. You establish and have a record of the operating limits listed in Table 2 to this subpart over the 3-hour performance test during which Hg emissions did not exceed 2.0 E–05 kg/Mg (3.9 E–05 lb/ton) of fired product.</td>
<td>ii. You establish and have a record of the operating limits listed in Table 2 to this subpart over the 3-hour performance test during which dioxin/furan emissions did not exceed 1.3 ng/kg of fired product.</td>
<td>ii. You establish and have a record of the operating limits listed in Table 2 to this subpart over the 3-hour performance test during which PM emissions did not exceed 0.22 ng/kg of greenware fired.</td>
</tr>
<tr>
<td>c. Dioxin/furan emissions must not exceed 0.22 ng/kg of fired product.</td>
<td>c. Dioxin/furan emissions must not exceed 0.22 ng/kg of fired product.</td>
<td>a. PM emissions must not exceed 0.048 kg/Mg (0.095 lb/ton) of greenware fired.</td>
</tr>
<tr>
<td>i. The dioxin/furan emissions measured using Method 23 of 40 CFR part 60, appendix A–7, over the period of the initial performance test, do not exceed 1.3 ng/kg of fired product; and</td>
<td>ii. You establish and have a record of the operating limits listed in Table 2 to this subpart over the 3-hour performance test during which dioxin/furan emissions did not exceed 0.19 kg/Mg (0.37 lb/ton) of greenware fired.</td>
<td>i. The PM emissions measured using Method 5 of 40 CFR part 60, appendix A–3 or Method 29 of 40 CFR part 60, appendix A–8, over the period of the initial performance test, according to the calculations in §63.8595(f)(1), do not exceed 0.048 kg/Mg (0.095 lb/ton) of greenware fired; and</td>
</tr>
<tr>
<td>ii. You establish and have a record of the operating limits listed in Table 2 to this subpart over the 3-hour performance test during which dioxin/furan emissions did not exceed 1.3 ng/kg of fired product.</td>
<td>ii. You establish and have a record of the operating limits listed in Table 2 to this subpart over the 3-hour performance test during which PM emissions did not exceed 0.048 kg/Mg (0.095 lb/ton) of greenware fired.</td>
<td>ii. You establish and have a record of the operating limits listed in Table 2 to this subpart over the 3-hour performance test during which PM emissions did not exceed 0.22 ng/kg of greenware fired.</td>
</tr>
<tr>
<td>b. Hg emissions must not exceed 1.1 E–04 kg/Mg (2.1 E–04 lb/ton) of fired product.</td>
<td>b. Hg emissions must not exceed 1.1 E–04 kg/Mg (2.1 E–04 lb/ton) of fired product.</td>
<td>b. Hg emissions must not exceed 6.1 E–05 kg/Mg (1.3 E–04 lb/ton) of greenware fired.</td>
</tr>
<tr>
<td>i. The Hg emissions measured using Method 29 of 40 CFR part 60, appendix A–8 or its alternative, ASTM D6784–02 (Reapproved 2008) (incorporated by reference, see §63.14), over the period of the initial performance test, do not exceed 1.1 E–04 kg/Mg (2.1 E–04 lb/ton) of fired product; and</td>
<td>ii. The PM emissions measured using Method 5 of 40 CFR part 60, appendix A–3 or Method 29 of 40 CFR part 60, appendix A–8, over the period of the initial performance test, according to the calculations in §63.8595(f)(1), do not exceed 0.048 kg/Mg (0.095 lb/ton) of greenware fired; and</td>
<td>ii. You establish and have a record of the operating limits listed in Table 2 to this subpart over the 3-hour performance test during which PM emissions did not exceed 0.048 kg/Mg (0.095 lb/ton) of greenware fired.</td>
</tr>
<tr>
<td>ii. You establish and have a record of the operating limits listed in Table 2 to this subpart over the 3-hour performance test during which Hg emissions did not exceed 1.1 E–04 kg/Mg (2.1 E–04 lb/ton) of fired product.</td>
<td>ii. You establish and have a record of the operating limits listed in Table 2 to this subpart over the 3-hour performance test during which PM emissions did not exceed 0.22 ng/kg of greenware fired.</td>
<td></td>
</tr>
<tr>
<td>a. PM emissions must not exceed 0.19 kg/Mg (0.37 lb/ton) of fired product.</td>
<td>a. PM emissions must not exceed 0.048 kg/Mg (0.095 lb/ton) of greenware fired.</td>
<td>a. PM emissions must not exceed 0.048 kg/Mg (0.095 lb/ton) of greenware fired.</td>
</tr>
<tr>
<td>i. The PM emissions measured using Method 5 of 40 CFR part 60, appendix A–3 or Method 29 of 40 CFR part 60, appendix A–8, over the period of the initial performance test, according to the calculations in §63.8595(f)(1), do not exceed 0.19 kg/Mg (0.37 lb/ton) of fired product; and</td>
<td>ii. The PM emissions measured using Method 5 of 40 CFR part 60, appendix A–3 or Method 29 of 40 CFR part 60, appendix A–8, over the period of the initial performance test, do not exceed 0.048 kg/Mg (0.095 lb/ton) of greenware fired; and</td>
<td>ii. You establish and have a record of the operating limits listed in Table 2 to this subpart over the 3-hour performance test during which PM emissions did not exceed 0.048 kg/Mg (0.095 lb/ton) of greenware fired.</td>
</tr>
<tr>
<td>ii. You establish and have a record of the operating limits listed in Table 2 to this subpart over the 3-hour performance test during which PM emissions did not exceed 0.048 kg/Mg (0.095 lb/ton) of greenware fired.</td>
<td></td>
<td>ii. You establish and have a record of the operating limits listed in Table 2 to this subpart over the 3-hour performance test during which PM emissions did not exceed 0.048 kg/Mg (0.095 lb/ton) of greenware fired.</td>
</tr>
<tr>
<td>For each . . .</td>
<td>For the following . . .</td>
<td>You have demonstrated initial compliance if . . .</td>
</tr>
<tr>
<td>----------------</td>
<td>-------------------------</td>
<td>-----------------------------------------------</td>
</tr>
<tr>
<td>16. New or reconstructed sanitaryware manual glaze application.</td>
<td>a. PM emissions must not exceed 2.0 kg/Mg (3.9 lb/ton) of first-fire glaze sprayed (dry weight basis).</td>
<td>i. The PM emissions measured using Method 5 of 40 CFR part 60, appendix A–3, over the period of the initial performance test, according to the calculations in §63.8595(f)(2), do not exceed 1.6 kg/Mg (3.2 lb/ton) of first-fire glaze sprayed (dry weight basis); and ii. You establish and have a record of the operating limits listed in Table 2 to this subpart over the 3-hour performance test during which PM emissions did not exceed 0.31 kg/Mg (0.61 lb/ton) of first-fire glaze sprayed (dry weight basis).</td>
</tr>
<tr>
<td>17. New or reconstructed sanitaryware spray machine glaze application.</td>
<td>a. PM emissions must not exceed 1.6 kg/Mg (3.2 lb/ton) of first-fire glaze sprayed (dry weight basis).</td>
<td>i. The PM emissions measured using Method 5 of 40 CFR part 60, appendix A–3, over the period of the initial performance test, according to the calculations in §63.8595(f)(2), do not exceed 1.6 kg/Mg (3.2 lb/ton) of first-fire glaze sprayed (dry weight basis); and ii. You establish and have a record of the operating limits listed in Table 2 to this subpart over the 3-hour performance test during which PM emissions did not exceed 0.31 kg/Mg (0.61 lb/ton) of first-fire glaze sprayed (dry weight basis).</td>
</tr>
<tr>
<td>18. New or reconstructed sanitaryware robot glaze application.</td>
<td>a. PM emissions must not exceed 1.2 kg/Mg (2.3 lb/ton) of first-fire glaze sprayed (dry weight basis).</td>
<td>i. The PM emissions measured using Method 5 of 40 CFR part 60, appendix A–3, over the period of the initial performance test, according to the calculations in §63.8595(f)(2), do not exceed 1.2 kg/Mg (2.3 lb/ton) of first-fire glaze sprayed (dry weight basis); and ii. You establish and have a record of the operating limits listed in Table 2 to this subpart over the 3-hour performance test during which PM emissions did not exceed 0.31 kg/Mg (0.61 lb/ton) of first-fire glaze sprayed (dry weight basis).</td>
</tr>
<tr>
<td>19. New or reconstructed floor tile spray dryer.</td>
<td>a. Dioxin/furan emissions must not exceed 0.071 ng/kg of throughput processed.</td>
<td>i. The dioxin/furan emissions measured using Method 23 of 40 CFR part 60, appendix A–7, over the period of the initial performance test, do not exceed 0.071 ng/kg of throughput processed; and ii. You establish and have a record of the operating limits listed in Table 2 to this subpart over the 3-hour performance test during which dioxin/furan emissions did not exceed 0.071 ng/kg of throughput processed.</td>
</tr>
<tr>
<td>20. New or reconstructed wall tile spray dryer.</td>
<td>a. Dioxin/furan emissions must not exceed 0.058 ng/kg of throughput processed.</td>
<td>i. The dioxin/furan emissions measured using Method 23 of 40 CFR part 60, appendix A–7, over the period of the initial performance test, do not exceed 0.058 ng/kg of throughput processed; and ii. You establish and have a record of the operating limits listed in Table 2 to this subpart over the 3-hour performance test during which dioxin/furan emissions did not exceed 0.058 ng/kg of throughput processed.</td>
</tr>
<tr>
<td>21. New or reconstructed floor tile press dryer.</td>
<td>a. Dioxin/furan emissions must not exceed 0.024 ng/kg of throughput processed.</td>
<td>i. The dioxin/furan emissions measured using Method 23 of 40 CFR part 60, appendix A–7, over the period of the initial performance test, do not exceed 0.024 ng/kg of throughput processed; and ii. You establish and have a record of the operating limits listed in Table 2 to this subpart over the 3-hour performance test during which dioxin/furan emissions did not exceed 0.024 ng/kg of throughput processed.</td>
</tr>
<tr>
<td>22. Existing, new, or reconstructed sanitaryware shuttle kiln.</td>
<td>a. Minimize HAP emissions . . .</td>
<td>i. Use natural gas, or equivalent, as the kiln fuel; and ii. Develop a designed firing time and temperature cycle for the sanitaryware shuttle kiln. You must either program the time and temperature cycle into your kiln or track each step on a log sheet; and . . .</td>
</tr>
</tbody>
</table>
### Table 7 to Subpart KKKKK of Part 63—Continuous Compliance With Emission Limitations and Work Practice Standards

As stated in §63.8620, you must demonstrate continuous compliance with each emission limitation and work practice standard that applies to you according to the following table:

<table>
<thead>
<tr>
<th>For each . . .</th>
<th>For the following . . .</th>
<th>You must demonstrate continuous compliance by . . .</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Tunnel or roller kiln equipped with a DIFF or DLS/FF.</td>
<td>Each emission limit in Table 1 to this subpart and each operating limit in Table 2 to this subpart for kilns equipped with DIFF or DLS/FF.</td>
<td>i. If you use a bag leak detection system, as prescribed in 63.8450(e), initiating corrective action within 1 hour of a bag leak detection system alarm and completing corrective actions in accordance with your OM&amp;M plan; operating and maintaining the fabric filter such that the alarm is not engaged for more than 5 percent of the total operating time in a 6-month block reporting period; in calculating this operating time fraction, if inspection of the fabric filter demonstrates that no corrective action is required, no alarm time is counted; if corrective action is required, each alarm is counted as a minimum of 1 hour; if you take longer than 1 hour to initiate corrective action, the alarm time is counted as the actual amount of time taken by you to initiate corrective action; or performing VE observations of the DIFF or DLS/FF stack at the frequency specified in §63.8620(e) using Method 22 of 40 CFR part 60, appendix A–7; and maintaining no VE from the DIFF or DLS/FF stack; and ii. Verifying that lime is free-flowing via a load cell, carrier gas/lime flow indicator, carrier gas pressure drop measurement system, or other system; recording all monitor or sensor output, and if lime is found not to be free flowing, promptly initiating and completing corrective actions in accordance with your OM&amp;M plan; recording the feeder setting once each shift of operation to verify that the feeder setting is being maintained at or above the level established during the HF/HCl performance test in which compliance was demonstrated.</td>
</tr>
<tr>
<td>2. Tunnel or roller kiln equipped with a WS.</td>
<td>Each emission limit in Table 1 to this subpart and each operating limit in Table 2 to this subpart for kilns equipped with WS.</td>
<td>i. Collecting the scrubber liquid pH data according to §63.8600(a); reducing the scrubber liquid pH data to 3-hour block averages according to §63.8600(a); maintaining the average scrubber liquid pH for each 3-hour block period at or above the average scrubber liquid pH established during the HF/HCl performance test in which compliance was demonstrated; and ii Collecting the scrubber liquid flow rate data according to §63.8600(a); reducing the scrubber liquid flow rate data to 3-hour block averages according to §63.8600(a); maintaining the average scrubber liquid flow rate for each 3-hour block period at or above the highest average scrubber liquid flow rate established during the HF/HCl performance test in which compliance was demonstrated.</td>
</tr>
<tr>
<td>3. Tunnel or roller kiln equipped with an ACI system.</td>
<td>Each emission limit in Table 1 to this subpart and each operating limit in Table 2 to this subpart for kilns equipped with ACI system.</td>
<td>Collecting the carbon flow rate data according to §63.8600(a); reducing the carbon flow rate data to 3-hour block averages according to §63.8600(a); maintaining the average carbon flow rate for each 3-hour block period at or above the highest average carbon flow rate established during the Hg and dioxin/furan performance tests in which compliance was demonstrated.</td>
</tr>
</tbody>
</table>
For each of the following, you must demonstrate continuous compliance by:

<table>
<thead>
<tr>
<th>For each . . .</th>
<th>For the following . . .</th>
<th>You must demonstrate continuous compliance by . . .</th>
</tr>
</thead>
<tbody>
<tr>
<td>4. Tunnel or roller kiln intending to comply with dioxin/furan emission limit without an ACI system.</td>
<td>Each emission limit in Table 1 to this subpart and each operating limit in Item 4 of Table 2 to this subpart for kilns intending to comply with dioxin/furan emission limit without an ACI system.</td>
<td>Collecting the stack temperature data according to §63.8600(a); and maintaining the stack temperature at or below the highest stack temperature established during the dioxin/furan performance test in which compliance was demonstrated.</td>
</tr>
<tr>
<td>5. Tunnel or roller kiln with no add-on control.</td>
<td>Each emission limit in Table 1 to this subpart and each operating limit in Item 5 of Table 2 to this subpart for tunnel or roller kilns with no add-on control.</td>
<td>i. Performing VE observations of the stack at the frequency specified in §63.8620(e) using Method 22 of 40 CFR part 60, appendix A–7; and maintaining no VE from the stack.</td>
</tr>
<tr>
<td>6. Glaze spray operation equipped with a FF.</td>
<td>Each emission limit in Table 1 to this subpart and each operating limit in Item 6 of Table 2 to this subpart for glaze spray operations equipped with a FF.</td>
<td>ii. If your last calculated total facility maximum potential HCl emission rate equivalent was not at or below the health-based standard in Table 1 to this subpart, collecting the kiln process rate data according to §63.8600(a); reducing the kiln process rate data to 3-hour block averages according to §63.8600(a); maintaining the average kiln process rate for each 3-hour block period at or below the kiln process rate determined according to §63.8595(g)(1).</td>
</tr>
<tr>
<td>7. Glaze spray operation equipped with a WS.</td>
<td>Each emission limit in Table 1 to this subpart and each operating limit in Item 7 of Table 2 to this subpart for kilns equipped with WS.</td>
<td>iii. Collecting the stack temperature data according to §63.8600(a); and maintaining the stack temperature at or below the highest stack temperature established during the dioxin/furan performance test in which compliance was demonstrated.</td>
</tr>
<tr>
<td>8. Glaze spray operation equipped with a water curtain.</td>
<td>Each emission limit in Table 1 to this subpart and each operating limit in Item 8 of Table 2 to this subpart for kilns equipped with a water curtain.</td>
<td>i. Conducting daily inspections to verify the presence of water flow to the wet control system; and ii. Conducting weekly visual inspections of the system ductwork and control equipment for leaks; and iii. Conducting annual inspections of the interior of the control equipment (if applicable) to determine the structural integrity and condition of the control equipment.</td>
</tr>
<tr>
<td>9. Glaze spray operation equipped with baffles.</td>
<td>Each emission limit in Table 1 to this subpart and each operating limit in Item 9 of Table 2 to this subpart for kilns equipped with baffles.</td>
<td>Conducting an annual visual inspection of the baffles to confirm the baffles are in place.</td>
</tr>
<tr>
<td>10. Spray dryer</td>
<td>Each emission limit in Table 1 to this subpart and each operating limit in Item 10 of Table 2 to this subpart for spray dryers.</td>
<td>Collecting the operating temperature data according to §63.8600(a); reducing the operating temperature data to 3-hour block averages according to §63.8600(a); maintaining the average operating temperature for each 3-hour block period at or above the average operating temperature established during the dioxin/furan performance test in which compliance was demonstrated.</td>
</tr>
</tbody>
</table>
For each floor tile press dryer, you must demonstrate continuous compliance by:

- Collecting the operating temperature data according to §63.8600(a); reducing the operating temperature data to 3-hour block averages according to §63.8600(a); maintaining the average operating temperature for each 3-hour block period at or below the average operating temperature established during the dioxin/furan performance test in which compliance was demonstrated.

- Maintaining records documenting your use of natural gas, or an equivalent fuel, as the kiln fuel at all times except during periods of natural gas curtailment or supply interruption; and

- If you intend to use an alternative fuel, submitting a notification of alternative fuel use within 48 hours of the declaration of a period of natural gas curtailment or supply interruption, as defined in §63.8665; and

- Submitting a report of alternative fuel use within 10 working days after terminating the use of the alternative fuel, as specified in §63.8635(g); and

- Using a designed firing time and temperature cycle for each sanitaryware shuttle kiln; and

- For each firing load, documenting the total tonnage of greenware placed in the kiln to ensure that it is not greater than the maximum load identified in Item 1.a.iii of Table 3 to this subpart; and

- Following maintenance procedures for each kiln that, at a minimum, specify the frequency of inspection and maintenance of temperature monitoring devices, controls that regulate air-to-fuel ratios, and controls that regulate firing cycles; and

- Developing and maintaining records for each sanitaryware shuttle kiln, as specified in §63.8640.

### Table 8 to Subpart KKKKK of Part 63—Compliance Dates

As stated in §63.8545, you must meet each compliance date in the following table that applies to you:

<table>
<thead>
<tr>
<th>If you have an event</th>
<th>Then you must</th>
<th>No later than</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. New or reconstructed affected source is after December 18, 2014 but before December 28, 2015.</td>
<td>Comply with the applicable emission limitations and work practice standards in Tables 1, 2, and 3 to this subpart.</td>
<td>December 28, 2015.</td>
</tr>
<tr>
<td>2. New or reconstructed affected source is after December 28, 2015.</td>
<td>Comply with the applicable emission limitations and work practice standards in Tables 1, 2, and 3 to this subpart.</td>
<td>Initial startup of your affected source.</td>
</tr>
<tr>
<td>3. Existing affected source</td>
<td>Comply with the applicable emission limitations and work practice standards in Tables 1, 2, and 3 to this subpart.</td>
<td>December 26, 2018.</td>
</tr>
<tr>
<td>4. Existing area source that increases its emissions or its potential to emit such that it becomes a major source of HAP by adding a new affected source or by reconstructing.</td>
<td>Be in compliance with this subpart</td>
<td>Initial startup of your affected source as a major source.</td>
</tr>
<tr>
<td>5. New area source (i.e., an area source for which construction or reconstruction commenced after December 18, 2014) that increases its emissions or its potential to emit such that it becomes a major source of HAP.</td>
<td>Be in compliance with this subpart</td>
<td>Initial startup of your affected source as a major source.</td>
</tr>
</tbody>
</table>
### Table 9 to Subpart KKKKK of Part 63—Deadlines for Submitting Notifications

As stated in §63.8630, you must submit each notification that applies to you according to the following:

<table>
<thead>
<tr>
<th>If you . . .</th>
<th>You must . . .</th>
<th>No later than . . .</th>
<th>As specified in . . .</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. Start up your new or reconstructed affected source on or after December 28, 2015.</td>
<td>Submit an Initial Notification . . .</td>
<td>120 calendar days after you become subject to this subpart.</td>
<td>§ 63.9(b)(2).</td>
</tr>
<tr>
<td>3. Are required to conduct a performance test.</td>
<td>Submit a notification of intent to conduct a performance test.</td>
<td>60 calendar days before the performance test is scheduled to begin.</td>
<td>§ 63.7(b)(1).</td>
</tr>
<tr>
<td>4. Are required to conduct a compliance demonstration that includes a performance test according to the requirements in Table 4 to this subpart.</td>
<td>Submit a Notification of Compliance Status, including the performance test results.</td>
<td>60 calendar days following the completion of the performance test, by the close of business.</td>
<td>§ 63.9(h) and § 63.10(d)(2).</td>
</tr>
<tr>
<td>5. Are required to conduct a compliance demonstration required in Table 6 to this subpart that does not include a performance test (i.e., compliance demonstrations for the work practice standards).</td>
<td>Submit a Notification of Compliance Status.</td>
<td>30 calendar days following the completion of the compliance demonstrations, by the close of business.</td>
<td>§ 63.9(h).</td>
</tr>
<tr>
<td>6. Request to use the routine control device maintenance alternative standard according to §63.8570(d).</td>
<td>Submit your request . . . .</td>
<td>120 calendar days before the compliance date specified in §63.8545.</td>
<td></td>
</tr>
<tr>
<td>7. Own or operate an affected kiln that is subject to the work practice standard specified in Item 1 of Table 3 to this subpart, and you intend to use a fuel other than natural gas or equivalent to fire the affected kiln.</td>
<td>Submit a notification of alternative fuel use.</td>
<td>48 hours following the declaration of a period of natural gas curtailment or supply interruption, as defined in §63.8665.</td>
<td></td>
</tr>
</tbody>
</table>

### Table 10 to Subpart KKKKK of Part 63—Requirements for Reports

As stated in §63.8635, you must submit each report that applies to you according to the following:

<table>
<thead>
<tr>
<th>You must submit . . .</th>
<th>The report must contain . . .</th>
<th>You must submit the report . . .</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. A compliance report . .</td>
<td>a. If there are no deviations from any emission limitations or work practice standards that apply to you, a statement that there were no deviations from the emission limitations or work practice standards during the reporting period. If there were no periods during which the CMS was out-of-control as specified in your OM&amp;M plan, a statement that there were no periods during which the CMS was out-of-control during the reporting period.</td>
<td>Semiannually according to the requirements in §63.8635(b).</td>
</tr>
<tr>
<td></td>
<td>b. If you have a deviation from any emission limitation (emission limit, operating limit) during the reporting period, the report must contain the information in §63.8635(c)(b). If there were periods during which the CMS was out-of-control, as specified in your OM&amp;M plan, the report must contain the information in §63.8635(d).</td>
<td></td>
</tr>
</tbody>
</table>
Environmental Protection Agency  Pt. 63, Subpt. KKKKK, Table 11

You must submit . . . The report must contain . . . You must submit the report . . .

2. A report of alternative fuel use . . . The information in §63.8635(g) . . . . If you are subject to the work practice standards specified in Table 3 to this subpart, and you use an alternative fuel to fire an affected kiln, by letter within 10 working days after terminating the use of the alternative fuel.

<table>
<thead>
<tr>
<th>Citation</th>
<th>Subject</th>
<th>Brief description</th>
<th>Applies to subpart KKKKK?</th>
</tr>
</thead>
<tbody>
<tr>
<td>§63.1</td>
<td>Applicability</td>
<td>Initial applicability determination; applicability after standard established; permit requirements; extensions, notifications.</td>
<td>Yes.</td>
</tr>
<tr>
<td>§63.2</td>
<td>Definitions</td>
<td>Definitions for part 63 standards</td>
<td>Yes.</td>
</tr>
<tr>
<td>§63.3</td>
<td>Units and Abbreviations</td>
<td>Units and abbreviations for part 63 standards.</td>
<td>Yes.</td>
</tr>
<tr>
<td>§63.4</td>
<td>Prohibited Activities</td>
<td>Compliance date; circumvention; severability.</td>
<td>Yes.</td>
</tr>
<tr>
<td>§63.5</td>
<td>Construction/Reconstruction</td>
<td>Applicability; applications; approvals</td>
<td>Yes.</td>
</tr>
<tr>
<td>§63.6(a)</td>
<td>Applicability</td>
<td>General Provisions (GP) apply unless compliance extension; GP apply to area sources that become major.</td>
<td>Yes.</td>
</tr>
<tr>
<td>§63.6(b)(1)–(4)</td>
<td>Compliance Dates for New and Reconstructed sources.</td>
<td>Standards apply at effective date; 3 years after effective date; upon startup; 10 years after construction or reconstruction commences for section 112(f).</td>
<td>Yes.</td>
</tr>
<tr>
<td>§63.6(b)(5)</td>
<td>Notification</td>
<td>Must notify if commenced construction or reconstruction after proposal.</td>
<td>Yes.</td>
</tr>
<tr>
<td>§63.6(b)(6)</td>
<td>[Reserved]</td>
<td></td>
<td></td>
</tr>
<tr>
<td>§63.6(b)(7)</td>
<td>Compliance Dates for New and Reconstructed Area Sources That Become Major</td>
<td>Area sources that become major must comply with major source standards immediately upon becoming major, regardless of whether required to comply when they were area sources.</td>
<td>Yes.</td>
</tr>
<tr>
<td>§63.6(c)(1)–(2)</td>
<td>Compliance Dates for Existing Sources</td>
<td>Comply according to date in subpart, which must be no later than 3 years after effective date; for section 112(f) standards, comply within 90 days of effective date unless compliance extension.</td>
<td>Yes.</td>
</tr>
<tr>
<td>§63.6(c)(3)–(4)</td>
<td>[Reserved]</td>
<td></td>
<td>No.</td>
</tr>
<tr>
<td>§63.6(c)(5)</td>
<td>Compliance Dates for Existing Area Sources That Become Major</td>
<td>Area sources that become major must comply with major source standards by date indicated in subpart or by equivalent time period (for example, 3 years).</td>
<td>Yes.</td>
</tr>
<tr>
<td>§63.6(d)</td>
<td>[Reserved]</td>
<td></td>
<td></td>
</tr>
<tr>
<td>§63.6(e)(1)(i)</td>
<td>Operation &amp; Maintenance</td>
<td>General Duty to minimize emissions</td>
<td>No. See §63.8570(b) for general duty requirement.</td>
</tr>
<tr>
<td>§63.6(e)(1)(ii)</td>
<td>Operation &amp; Maintenance</td>
<td>Requirement to correct malfunctions ASAP.</td>
<td>No.</td>
</tr>
<tr>
<td>§63.6(e)(1)(iii)</td>
<td>Operation &amp; Maintenance</td>
<td>Operation and maintenance requirements enforceable independent of emissions limitations.</td>
<td>Yes.</td>
</tr>
<tr>
<td>§63.6(e)(2)</td>
<td>[Reserved]</td>
<td></td>
<td></td>
</tr>
<tr>
<td>§63.6(e)(3)</td>
<td>Startup, Shutdown, and Malfunction Plan (SSMP)</td>
<td>Requirement for startup, shutdown, and malfunction (SSM) and SSMP content of SSMP.</td>
<td>No.</td>
</tr>
<tr>
<td>§63.6(f)(1)</td>
<td>Compliance Except During SSMP</td>
<td>You must comply with emission standards at all times except during SSMP.</td>
<td>No.</td>
</tr>
<tr>
<td>§63.6(f)(2)–(3)</td>
<td>Methods for Determining Compliance</td>
<td>Compliance based on performance test, operation and maintenance plans, records, inspection.</td>
<td>Yes.</td>
</tr>
<tr>
<td>§63.6(g)</td>
<td>Alternative Standard</td>
<td>Procedures for getting an alternative standard.</td>
<td>Yes.</td>
</tr>
<tr>
<td>§63.6(h)</td>
<td>Opacity/VE Standards</td>
<td>Requirements for opacity and VE standards.</td>
<td>No, not applicable.</td>
</tr>
</tbody>
</table>

Table 11 to Subpart KKKKK of Part 63—Applicability of General Provisions to Subpart KKKKK

As stated in §63.8655, you must comply with the General Provisions in §§63.1 through 63.16 that apply to you according to the following table:
<table>
<thead>
<tr>
<th>Citation</th>
<th>Subject</th>
<th>Brief description</th>
<th>Applies to subpart KKKKK?</th>
</tr>
</thead>
<tbody>
<tr>
<td>§ 63.6(i)</td>
<td>Compliance Extension.</td>
<td>Procedures and criteria for Administrator to grant compliance extension.</td>
<td>Yes.</td>
</tr>
<tr>
<td>§ 63.6(j)</td>
<td>Presidential Compliance Exemption. Performance Test Dates.</td>
<td>President may exempt source category ...</td>
<td>Yes.</td>
</tr>
<tr>
<td>§ 63.7(a)(1)–(2)</td>
<td>Section 114 Authority.</td>
<td>Administrator may require a performance test under CAA section 114 at any time.</td>
<td>Yes.</td>
</tr>
<tr>
<td>§ 63.7(a)(3)</td>
<td>Notification of Delay in Performance Testing Due To Force Majeure.</td>
<td>Must notify Administrator of delay in performance testing due to force majeure.</td>
<td>Yes.</td>
</tr>
<tr>
<td>§ 63.7(a)(4)</td>
<td>Notification of Rescheduling. Quality Assurance (QA)/Test Plan.</td>
<td>Must notify Administrator 60 days before the test.</td>
<td>Yes.</td>
</tr>
<tr>
<td>§ 63.7(b)(1)</td>
<td>Conditions for Conducting Performance Tests.</td>
<td>Must conduct according to subpart and EPA test methods unless Administrator approves alternative; must have at least three test runs of at least 1 hour each; compliance is based on arithmetic mean of three runs; conditions when data from an additional test run can be used.</td>
<td>Yes.</td>
</tr>
<tr>
<td>§ 63.7(c)</td>
<td>Testing Facilities. Conditions for Conducting Performance Tests.</td>
<td>Performace tests must be conducted under representative conditions.</td>
<td>Yes.</td>
</tr>
<tr>
<td>§ 63.7(d)(1)</td>
<td>Monitoring System Operation and Maintenance.</td>
<td>Administration’s authority to require testing under section 114 of the Act.</td>
<td>Yes.</td>
</tr>
<tr>
<td>§ 63.7(e)(2)–(3)</td>
<td>Performance Test Data Analysis.</td>
<td>Must include raw data in performance test report; must submit performance test data 60 days after end of test with the notification of compliance status.</td>
<td>Yes.</td>
</tr>
<tr>
<td>§ 63.7(f)</td>
<td>Waiver of Tests.</td>
<td>Procedures for Administrator to waive performance test.</td>
<td>Yes.</td>
</tr>
<tr>
<td>§ 63.7(g)</td>
<td>Applicability of Monitoring Requirements.</td>
<td>Subject to all monitoring requirements in subpart.</td>
<td>Yes.</td>
</tr>
<tr>
<td>§ 63.7(h)</td>
<td>Performance Specifications.</td>
<td>Performance Specifications in appendix B of 40 CFR part 60 apply.</td>
<td>Yes.</td>
</tr>
<tr>
<td>§ 63.8(a)(3)</td>
<td>Monitoring with Flares.</td>
<td>Requirements for flares in § 63.11 apply.</td>
<td>No, not applicable.</td>
</tr>
<tr>
<td>§ 63.8(b)(1)</td>
<td>Multiple Effluents and Multiple Monitoring Systems.</td>
<td>Must conduct monitoring according to standard unless Administrator approves alternative.</td>
<td>No.</td>
</tr>
<tr>
<td>§ 63.8(b)(2)–(3)</td>
<td>Monitoring System Operation and Maintenance.</td>
<td>Specific requirements for installing and reporting on monitoring systems.</td>
<td>Yes.</td>
</tr>
<tr>
<td>§ 63.8(c)(1)(ii)</td>
<td>Routine and Predictable SSM.</td>
<td>Reporting requirements for SSM when action is described in SSMP.</td>
<td>No.</td>
</tr>
<tr>
<td>§ 63.8(c)(1)(iii)</td>
<td>SSM not in SSMP ...</td>
<td>Reporting requirements for SSM when action is not described in SSMP.</td>
<td>No.</td>
</tr>
<tr>
<td>§ 63.8(c)(1)(iii)</td>
<td>Compliance with Operation and Maintenance Requirements.</td>
<td>How Administrator determines if source complying with operation and maintenance requirements.</td>
<td>No.</td>
</tr>
<tr>
<td>Citation</td>
<td>Subject</td>
<td>Brief description</td>
<td>Applies to subpart KKKKK?</td>
</tr>
<tr>
<td>----------</td>
<td>---------</td>
<td>------------------</td>
<td>--------------------------</td>
</tr>
<tr>
<td>§ 63.8(c)(2)–(3)</td>
<td>Monitoring System Installation and parameter measurements</td>
<td>Must install to get representative emission</td>
<td>Yes.</td>
</tr>
<tr>
<td>§ 63.8(c)(4)</td>
<td>CMS Requirements</td>
<td>Requirements for CMS</td>
<td>No, § 63.8600 specifies requirements.</td>
</tr>
<tr>
<td>§ 63.8(c)(5)</td>
<td>Continuous Opacity Monitoring System (COMS) Minimum Procedures</td>
<td>COMS minimum procedures</td>
<td>No, not applicable.</td>
</tr>
<tr>
<td>§ 63.8(c)(6)</td>
<td>CMS Requirements</td>
<td>Zero and high level calibration check requirements</td>
<td>Yes.</td>
</tr>
<tr>
<td>§ 63.8(c)(7)–(8)</td>
<td>CMS Quality Control</td>
<td>Out-of-control periods</td>
<td>Yes.</td>
</tr>
<tr>
<td>§ 63.8(d)(1) and (2)</td>
<td>CMS Quality Control</td>
<td>Requirements for CMS quality control</td>
<td>Yes.</td>
</tr>
<tr>
<td>§ 63.8(e)</td>
<td>CMS Performance Evaluation</td>
<td>Written procedures for CMS</td>
<td>Yes.</td>
</tr>
<tr>
<td>§ 63.8(f)(1)–(5)</td>
<td>Alternative Monitoring Method, Alternative to Relative Accuracy Test</td>
<td>Procedures for Administrator to approve alternative monitoring</td>
<td>Yes.</td>
</tr>
<tr>
<td>§ 63.8(f)(6)</td>
<td>Alternative to Relative Accuracy Test</td>
<td>Procedures for Administrator to approve alternative relative accuracy test for continuous emission monitoring systems (CEMS)</td>
<td>No, not applicable.</td>
</tr>
<tr>
<td>§ 63.8(g)</td>
<td>Data Reduction</td>
<td>COMS and CEMS data reduction requirements</td>
<td>No, not applicable.</td>
</tr>
<tr>
<td>§ 63.9(a)</td>
<td>Notification Requirements</td>
<td>Applicability; State delegation</td>
<td>Yes.</td>
</tr>
<tr>
<td>§ 63.9(b)</td>
<td>Initial Notifications and Compliance Extension</td>
<td>Requirements for initial notifications</td>
<td>Yes.</td>
</tr>
<tr>
<td>§ 63.9(c)</td>
<td>Notification of Special Compliance Requirements for New Source</td>
<td>Can request if cannot comply by date or if installed BACT/LAER.</td>
<td>Yes.</td>
</tr>
<tr>
<td>§ 63.9(d)</td>
<td>Notification of Performance Test, Notification of VE/Opacity Test</td>
<td>Notify Administrator 60 days prior</td>
<td>Yes.</td>
</tr>
<tr>
<td>§ 63.9(f)</td>
<td>Additional Notifications When Using CMS</td>
<td></td>
<td>No, not applicable.</td>
</tr>
<tr>
<td>§ 63.9(g)</td>
<td>Additional Notifications When Using CMS</td>
<td>Notification of performance evaluation</td>
<td>Yes.</td>
</tr>
<tr>
<td>§ 63.9(h)</td>
<td>Notification of Compliance Status</td>
<td>Contents; submittal requirements</td>
<td>Yes.</td>
</tr>
<tr>
<td>§ 63.9(i)</td>
<td>Adjustment of Submittal Deadlines</td>
<td>Procedures for Administrator to approve change in when notifications must be submitted</td>
<td>Yes.</td>
</tr>
<tr>
<td>§ 63.9(j)</td>
<td>Change in Previous Information</td>
<td>Must submit within 15 days after the change</td>
<td>Yes.</td>
</tr>
<tr>
<td>§ 63.10(a)</td>
<td>Recordkeeping/Reporting</td>
<td>Applicability; general information</td>
<td>Yes.</td>
</tr>
<tr>
<td>§ 63.10(b)(1)</td>
<td>General Recordkeeping Requirements</td>
<td>General requirements</td>
<td>Yes.</td>
</tr>
<tr>
<td>§ 63.10(b)(2)(i)</td>
<td>Records Related to SSM</td>
<td>Recordkeeping of occurrence and duration of startups and shutdowns</td>
<td>No.</td>
</tr>
<tr>
<td>§ 63.10(b)(2)(ii)</td>
<td>Records Related to SSM</td>
<td>Recordkeeping of failures to meet a standard</td>
<td>No. See § 63.8640(c)(2) for recordkeeping of (1) date, time and duration; (2) listing of affected source or equipment, and an estimate of the volume of each regulated pollutant emitted over the standard; and (3) actions to minimize emissions and correct the failure.</td>
</tr>
<tr>
<td>§ 63.10(b)(2)(iii)</td>
<td>Records Related to SSM</td>
<td>Maintenance records</td>
<td>Yes.</td>
</tr>
<tr>
<td>§ 63.10(b)(2)(iv)–(v)</td>
<td>Records Related to SSM</td>
<td>Actions taken to minimize emissions during SSM</td>
<td>No.</td>
</tr>
<tr>
<td>§ 63.10(b)(2)(vi)–(ix)</td>
<td>Records Related to SSM</td>
<td>Records when CMS is malfunctioning, ineffective or out-of-control</td>
<td>Yes.</td>
</tr>
<tr>
<td>§ 63.10(b)(2)(x)</td>
<td>Records</td>
<td>Records when using alternative to relative accuracy test</td>
<td>No, not applicable.</td>
</tr>
<tr>
<td>§ 63.10(b)(3)</td>
<td>Records</td>
<td>Applicability Determinations</td>
<td>Yes.</td>
</tr>
</tbody>
</table>
§ 63.8680 40 CFR Ch. 1 (7–1–16 Edition)

<table>
<thead>
<tr>
<th>Citation</th>
<th>Subject</th>
<th>Brief description</th>
<th>Applies to subpart KKKKK?</th>
</tr>
</thead>
<tbody>
<tr>
<td>§ 63.10(c)(1)–(15)</td>
<td>Records</td>
<td>Additional records for CMS</td>
<td>No, §§ 63.8575 and 63.8640 specify requirements.</td>
</tr>
<tr>
<td>§ 63.10(d)(1) and (2)</td>
<td>General Reporting Requirements</td>
<td>Requirements for reporting; performance test results reporting.</td>
<td>Yes.</td>
</tr>
<tr>
<td>§ 63.10(d)(3)</td>
<td>ReportingOpacity or VE Observations.</td>
<td>Requirements for reporting opacity and VE.</td>
<td>No, not applicable.</td>
</tr>
<tr>
<td>§ 63.10(d)(4)</td>
<td>Progress Reports</td>
<td>Must submit progress reports on schedule if under compliance extension.</td>
<td>Yes.</td>
</tr>
<tr>
<td>§ 63.10(d)(5)</td>
<td>SSM Reports</td>
<td>Contents and submission</td>
<td>No. See §63.8635(c)(8) for malfunction reporting requirements.</td>
</tr>
<tr>
<td>§ 63.10(e)(1)–(3)</td>
<td>Additional CMS Reports.</td>
<td>Requirements for CMS reporting</td>
<td>No, §§ 63.8575 and 63.8635 specify requirements.</td>
</tr>
<tr>
<td>§ 63.10(e)(4)</td>
<td>Reporting COMS data.</td>
<td>Requirements for reporting COMS data with performance test data.</td>
<td>No, not applicable.</td>
</tr>
<tr>
<td>§ 63.10(f)</td>
<td>Waiver for Recordkeeping/Reporting.</td>
<td>Procedures for Administrator to waive</td>
<td>Yes.</td>
</tr>
<tr>
<td>§ 63.11</td>
<td>Flares</td>
<td>Requirement for flares</td>
<td>No, not applicable.</td>
</tr>
<tr>
<td>§ 63.12</td>
<td>Delegation</td>
<td>State authority to enforce standards</td>
<td>Yes.</td>
</tr>
<tr>
<td>§ 63.13</td>
<td>Addresses</td>
<td>Addresses for reports, notifications, requests.</td>
<td>Yes.</td>
</tr>
<tr>
<td>§ 63.14</td>
<td>Incorporation by Reference</td>
<td>Materials incorporated by reference</td>
<td>Yes.</td>
</tr>
<tr>
<td>§ 63.15</td>
<td>Availability of Information</td>
<td>Information availability; confidential information.</td>
<td>Yes.</td>
</tr>
<tr>
<td>§ 63.16</td>
<td>Performance Track Provisions.</td>
<td>Requirements for Performance Track member facilities.</td>
<td>Yes.</td>
</tr>
</tbody>
</table>

Subpart LLLL—National Emission Standards for Hazardous Air Pollutants: Asphalt Processing and Asphalt Roofing Manufacturing

SOURCE: 68 FR 24577, May 7, 2003, unless otherwise noted.

WHAT THIS SUBPART COVERS

§ 63.8680 What is the purpose of this subpart?

This subpart establishes national emission standards for hazardous air pollutants (NESHAP) for existing and new asphalt processing and asphalt roofing manufacturing facilities. This subpart also establishes requirements to demonstrate initial and continuous compliance with the emission limitations.

§ 63.8681 Am I subject to this subpart?

(a) You are subject to this subpart if you own or operate an asphalt processing facility or an asphalt roofing manufacturing facility, as defined in §63.8698, that is a major source of hazardous air pollutants (HAP) emissions, or is located at, or is part of a major source of HAP emissions.

(b) After the applicable compliance date specified in §63.8683, blowing stills, asphalt storage tanks, saturators, wet loopers, and coaters subject to the provisions of this subpart that are also subject to 40 CFR part 60, subpart UU, are required to comply only with provisions of this subpart.

(c) This subpart does not apply to any equipment that is subject to subpart CC of this part or to subpart K, Ka, or Kb of 40 CFR part 60.

(d) This subpart does not apply to asphalt processing and asphalt roofing manufacturing equipment used for research and development, as defined in §63.8698.

(e) The provisions of subpart J of 40 CFR part 60 do not apply to emissions from asphalt processing facilities subject to this subpart.

(f) A major source of HAP emissions is any stationary source or group of stationary sources within a contiguous area under common control that emits or has the potential to emit any single HAP at a rate of 9.07 megagrams (10 tons) or more per year or any combination of HAP at a rate of 22.68 megagrams (25 tons) or more per year.

[68 FR 24577, May 7, 2003, as amended at 70 FR 28364, May 17, 2005]
§ 63.8682 What parts of my plant does this subpart cover?
(a) This subpart applies to each new, reconstructed, or existing affected source at asphalt processing and asphalt roofing manufacturing facilities.
(b) The affected source is:
(1) Each asphalt processing facility as defined in § 63.8698; or
(2) Each asphalt roofing manufacturing line as defined in § 63.8698.
(i) If the asphalt roofing manufacturing line is collocated with an asphalt processing facility, the storage tanks that store asphalt flux intended for oxidation in the blowing stills and those tanks that receive asphalt directly from the on-site blowing stills are part of the asphalt processing facility. The remaining asphalt storage tanks are considered to be part of the asphalt roofing facility.
(ii) If an asphalt storage tank is shared by two or more lines at an asphalt roofing manufacturing facility, the shared storage tank is considered part of the line to which the tank supplies the greatest amount of asphalt, on an annual basis.
(iii) If a sealant or adhesive applicator is shared by two or more asphalt roofing manufacturing lines, the shared applicator is considered part of the line that provides the greatest throughput to the applicator, on an annual basis.
(c) An affected source is a new affected source if you commenced construction of the affected source after November 21, 2001, and you met the applicability criteria at the time you commenced construction.
(d) An affected source is reconstructed if you meet the criteria in the reconstruction definition in § 63.2.
(e) An affected source is existing if it is not new or reconstructed.

§ 63.8683 When must I comply with this subpart?
(a) If you have a new or reconstructed affected source and start up:
(1) On or before April 29, 2003, then you must comply with the requirements for new and reconstructed sources in this subpart upon startup.
(b) If you have an existing affected source, you must comply with the requirements for existing sources no later than May 1, 2006.
(c) If you have an area source that increases its emissions or its potential to emit such that it becomes a (or part of a) major source of HAP, then the following requirements apply:
(1) Any portion of the existing facility that becomes a new or reconstructed affected source must be in compliance with this subpart upon startup or by April 29, 2003, whichever is later.
(2) All other parts of the source to which this subpart applies must be in compliance with this subpart by 3 years after the date the source becomes a major source.
(d) You must meet the notification requirements in § 63.8692 according to the schedules in §§ 63.8692 and 63.9. Some of the notifications must be submitted before you are required to comply with the emission limitations in this subpart.

EMISSION LIMITATIONS

§ 63.8684 What emission limitations must I meet?
(a) You must meet each emission limitation in Table 1 to this subpart that applies to you.
(b) You must meet each operating limit in Table 2 to this subpart that applies to you.

GENERAL COMPLIANCE REQUIREMENTS

§ 63.8685 What are my general requirements for complying with this subpart?
(a) You must be in compliance with the emission limitations (including operating limits) in this subpart at all times, except during periods of startup, shutdown, and malfunction.
(b) You must always operate and maintain your affected source, including air pollution control and monitoring equipment, according to the provisions in § 63.6(e)(1)(i).
(c) You must develop a written startup, shutdown, and malfunction plan (SSMP) according to the provisions in § 63.6(e)(3).
§ 63.8686  (d) You must develop and implement a written site-specific monitoring plan according to the provisions in § 63.8688(g) and (h).


TESTING AND INITIAL COMPLIANCE REQUIREMENTS

§ 63.8686  By what date must I conduct performance tests or other initial compliance demonstrations?

(a) For existing affected sources, you must conduct performance tests no later than 180 days after the compliance date that is specified for your source in § 63.8683 and according to the provisions in §63.7(a)(2).

(b) As an alternative to the requirement specified in paragraph (a) of this section, you may use the results of a previously-conducted emission test to demonstrate compliance with the emission limitations in this subpart if you demonstrate to the Administrator's satisfaction that:

(1) No changes have been made to the process since the time of the emission test; and

(2) The operating conditions and test methods used during testing conform to the requirements of this subpart; and

(3) The control device and process parameter values established during the previously-conducted emission test are used to demonstrate continuous compliance with this subpart.

(c) For new sources, you must demonstrate initial compliance no later than 180 calendar days after April 29, 2003 or within 180 calendar days after startup of the source, whichever is later.

§ 63.8687  What performance tests, design evaluations, and other procedures must I use?

(a) You must conduct each performance test in Table 3 to this subpart that applies to you.

(b) Each performance test must be conducted under normal operating conditions and under the conditions specified in Table 3 to this subpart.

(c) You may not conduct performance tests during periods of startup, shutdown, or malfunction, as specified in §63.7(e)(1).

(d) Except for opacity and visible emission observations, 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) You must use the following equations to determine compliance with the emission limitations.

(1) To determine compliance with the particulate matter mass emission rate, you must use Equations 1 and 2 of this section as follows:

$$E = \frac{M_{PM}}{P} \quad \text{(Eq. 1)}$$

Where:

- $E$ = Particulate matter emission rate, kilograms of particulate matter per megagram of roofing product manufactured.
- $M_{PM}$ = Particulate matter mass emission rate, kilograms per hour, determined using Equation 2.
- $P$ = The asphalt roofing product manufacturing rate during the emissions sampling period, including any material trimmed from the final product, megagram per hour.

$$M_{PM} = C \times Q \times K \quad \text{(Eq. 2)}$$

Where:

- $M_{PM}$ = Particulate matter mass emission rate, kilograms per hour.
- $C$ = Concentration of particulate matter on a dry basis, grams per dry standard cubic meter (g/dscm), as measured by the test method specified in Table 3 to this subpart.
- $Q$ = Vent gas stream flow rate (dry standard cubic meters per minute) at a temperature of 20 °C as measured by the test method specified in Table 3 to this subpart.
- $K$ = Unit conversion constant (0.06 minute-kilogram/hour-gram).

(2) To determine compliance with the total hydrocarbon percent reduction standard, you must use Equations 3 and 4 of this section as follows:

$$RE = \left[\frac{(M_{THCl} - M_{THC0})}{(M_{THCl})}\right] \times 100 \quad \text{(Eq. 3)}$$
Environmental Protection Agency

§ 63.8688

Where:

RE = Emission reduction efficiency, percent.

\( M_{THC} \) = Mass flow rate of total hydrocarbons entering the control device, kilograms per hour, determined using Equation 4.

\( M_{THC,0} \) = Mass flow rate of total hydrocarbons exiting the control device, kilograms per hour, determined using Equation 4.

\( M_{THC} = C \times Q \times K \) (Eq. 4)

Where:

\( M_{THC} \) = Total hydrocarbon mass flow rate, kilograms per hour.

\( C \) = Concentration of total hydrocarbons on a dry basis, parts per million by volume (ppmv), as measured by the test method specified in Table 3 to this subpart.

\( Q \) = Vent gas stream flow rate (dscm/minute) at a temperature of 20 °C as measured by the test method specified in Table 3 to this subpart.

\( K \) = Unit conversion constant (1.10E–04 (ppmv)\(^{-1}\) (kilogram/dscm)(minute/hour)).

(3) To determine compliance with the combustion efficiency standard, you must use Equation 5 of this section as follows:

\[
CE = \left[1 - \left(\frac{CO}{CO_2}\right) - \left(\frac{THC}{CO_2}\right)\right] \quad (Eq. 5)
\]

Where:

\( CE \) = Combustion efficiency, percent.

\( CO \) = Carbon monoxide concentration at the combustion device outlet, parts per million by volume (dry), as measured by the test method specified in Table 3 to this subpart.

\( CO_2 \) = Carbon dioxide concentration at the combustion device outlet, parts per million by volume (dry), as measured by the test method specified in Table 3 to this subpart.

\( THC \) = Total hydrocarbon concentration at the combustion device outlet, parts per million by volume (dry), as measured by the test method specified in Table 3 to this subpart.

(4) To determine compliance with the total hydrocarbon destruction efficiency standard for a combustion device that does not use auxiliary fuel, you must use Equation 6 of this section as follows:

\[
THC\ DE = \left[\frac{(CO + CO_2)}{(CO + CO_2 + THC)}\right] \quad (Eq. 6)
\]

Where:

\( THC\ DE \) = THC destruction efficiency, percent.

\( CO \) = Carbon monoxide concentration at the combustion device outlet, parts per million by volume (dry), as measured by the test method specified in Table 3 to this subpart.

\( CO_2 \) = Carbon dioxide concentration at the combustion device outlet, parts per million by volume (dry), as measured by the test method specified in Table 3 to this subpart.

\( THC \) = Total hydrocarbon concentration at the combustion device outlet, parts per million by volume (dry), as measured by the test method specified in Table 3 to this subpart.

[68 FR 24577, May 7, 2003, as amended at 70 FR 28364, May 17, 2005]

§ 63.8688 What are my monitoring installation, operation, and maintenance requirements?

(a) You must install, operate, and maintain each continuous parameter monitoring system (CPMS) according to the following:

(1) The CPMS must complete a minimum of one cycle of operation for each successive 15-minute period.

(2) To determine the 3-hour average, you must:

(i) Have a minimum of four successive cycles of operation to have a valid hour of data.

(ii) Have valid data from at least three of four equally spaced data values for that hour from a CPMS that is not out-of-control according to your site-specific monitoring plan.
(iii) Determine the 3-hour average of all recorded readings for each operating day, except as stated in §63.8690(c). You must have at least two of the three hourly averages for that period using only hourly average values that are based on valid data (i.e., not from out-of-control periods).

(3) You must record the results of each inspection, calibration, and validation check.

(b) For each temperature monitoring device, you must meet the requirements in paragraph (a) of this section and the following:

(1) Locate the temperature sensor in a position that provides a representative temperature.

(2) For a noncryogenic temperature range, use a temperature sensor with a minimum measurement sensitivity of 2.8 °C or 1.0 percent of the temperature value, whichever is larger.

(3) If a chart recorder is used, it must have a sensitivity in the minor division of at least 20 °F.

(4) Perform an accuracy check at least semiannually or following an operating parameter deviation:

(i) According to the procedures in the manufacturer’s documentation; or

(ii) By comparing the sensor output to redundant sensor output; or

(iii) By comparing the sensor output to the output from a calibrated temperature measurement device; or

(iv) By comparing the sensor output to the output from a temperature simulator.

(5) Conduct accuracy checks any time the sensor exceeds the manufacturer’s specified maximum operating temperature range or install a new pressure sensor.

(6) At least quarterly or following an operating parameter deviation, perform a leak check of all components for integrity, all electrical connections for continuity, and all mechanical connections for leakage.

(c) For each pressure measurement device, you must meet the requirements of paragraph (a) of this section and the following:

(1) Locate the pressure sensor(s) in, or as close as possible, to a position that provides a representative measurement of the pressure.

(2) Use a gauge with a minimum measurement sensitivity of 0.12 kiloPascals or a transducer with a minimum measurement sensitivity of 5 percent of the pressure range.

(3) Check pressure tap pluggage daily. Perform an accuracy check at least quarterly or following an operating parameter deviation:

(i) According to the procedures in the manufacturer’s documentation; or

(ii) By comparing the sensor output to redundant sensor output.

(4) Conduct calibration checks any time the sensor exceeds the manufacturer’s specified maximum operating pressure range or install a new pressure sensor.

(5) At least monthly or following an operating parameter deviation, perform visible inspections on all components if redundant sensors are not used.

(d) For monitoring parameters other than temperature and pressure drop, you must install and operate a CPMS to provide representative measurements of the monitored parameters.

(e) For each flare, you must install a device (including but not limited to a thermocouple, an ultraviolet beam sensor, or an infrared sensor) capable of continuously detecting the presence of a pilot flame.

(f) As an option to installing the CPMS specified in paragraph (a) of this section, you may install a continuous emissions monitoring system (CEMS) or a continuous opacity monitoring system (COMS) that meets the requirements specified in §63.8 and the applicable performance specifications of 40 CFR part 60, appendix B.

(g) For each monitoring system required in this section, you must develop and make available for inspection by the permitting authority, upon request, a site-specific monitoring plan that addresses the following:

(1) Installation of the CPMS, CEMS, or COMS sampling probe or other interface at a measurement location relative to each affected process unit such that the measurement is representative of control of the exhaust
emissions (e.g., on or downstream of the last control device); (2) Performance and equipment specifications for the sample interface, the pollutant concentration or parametric signal analyzer, and the data collection and reduction system; and (3) Performance evaluation procedures and acceptance criteria (e.g., calibrations).

(h) In your site-specific monitoring plan, you must also address the following:

(1) Ongoing operation and maintenance procedures in accordance with the general requirements of §63.8(c)(1), (c)(3), (c)(4)(ii), (c)(7), and (c)(8);
(2) Ongoing data quality assurance procedures in accordance with the general requirements of §63.8(d); and
(3) Ongoing recordkeeping and reporting procedures in accordance with the general requirements of §63.10(c), (e)(1), and (e)(2)(i).

(i) You must conduct a performance evaluation of each CPMS, CEMS, or COMS in accordance with your site-specific monitoring plan.

(j) You must operate and maintain the CPMS, CEMS, or COMS in continuous operation according to the site-specific monitoring plan.

§ 63.8690 How do I monitor and collect data to demonstrate continuous compliance?

(a) 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 (or collect data at all required intervals) at all times that the affected source is operating. This includes periods of startup, shutdown, and malfunction when the affected source 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, nor may such data be used in fulfilling a minimum data availability requirement, if applicable. You must use all the data collected during all other periods in assessing the operation of the control device and associated control system.

§ 63.8691 How do I demonstrate continuous compliance with the operating limits?

(a) You must demonstrate continuous compliance with each operating limit in Table 2 to this subpart that applies to you according to test methods specified in Table 5 to this subpart.

(b) You must report each instance in which you did not meet each operating limit in Table 5 to this subpart that applies to you. This includes periods of startup, shutdown, and malfunction. These instances are deviations from the emission limitations in this subpart. These deviations must be reported according to the requirements in §63.8693.

(c) [Reserved]

(d) Consistent with §§63.6(e) and 63.7(e)(1), deviations that occur during a period of startup, shutdown, or malfunction are not violations if you demonstrate to the Administrator’s satisfaction that you were operating in accordance with §63.6(e)(1). The Administrator will determine whether deviations that occur during a period of startup, shutdown, or malfunction are violations, according to the provisions in §63.6(e).
§ 63.8692  What notifications must I submit and when?

(a) You must submit all of the notifications in §§63.6(h)(4) and (5), 63.7(b) and (c), 63.8(f), and 63.9(b) through (f) and (h) that apply to you by the dates specified.

(b) As specified in §63.9(b)(2), if you start up your affected source before April 29, 2003, you must submit an Initial Notification not later than 120 calendar days after April 29, 2003.

(c) As specified in §63.9(b)(3), if you start up your new or reconstructed affected source on or after April 29, 2003, you must submit an Initial Notification not later than 120 calendar days after you become subject to this subpart.

(d) If you are required to conduct a performance test, you must submit a notification of intent to conduct a performance test at least 60 calendar days before the performance test is scheduled to begin, as required in §63.7(b)(1).

(e) If you are required to conduct a performance test, design evaluation, opacity observation, visible emission observation, or other initial compliance demonstration as specified in Table 3 or 4 to this subpart, you must submit a Notification of Compliance Status according to §63.9(h)(2)(ii). You must submit the Notification of Compliance Status, including the performance test results, before the close of business on the 60th calendar day following the completion of the performance test according to §63.10(d)(2).

(f) If you are using data from a previously-conducted emission test to serve as documentation of conformance with the emission standards and operating limits of this subpart, you must submit the test data in lieu of the initial performance test results with the Notification of Compliance Status required under paragraph (e) of this section.

§ 63.8693  What reports must I submit and when?

(a) You must submit each report in Table 6 to 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 6 to this subpart and according to the following dates:

1. The first compliance report must cover the period beginning on the compliance date that is specified for your affected source in §63.8683 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 §63.8683.

2. 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 §63.8683.

3. 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. 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 affected source that is subject to permitting regulations pursuant to 40 CFR part 70 or 40 CFR part 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 the dates in paragraphs (b)(1) through (4) of this section.

(c) The compliance report must contain the following information:

1. Company name and address.

2. Statement by a responsible official with that official's name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report.

3. Date of report and beginning and ending dates of the reporting period.

4. If you had a startup, shutdown or malfunction during the reporting period and you took actions consistent
with your SSMP, the compliance report must include the information in §63.10(d)(5)(i).

(5) If there are no deviations from any emission limitations (emission limit, operating limit, opacity limit, and visible emission limit) that apply to you, a statement that there were no deviations from the emission limitations during the reporting period.

(6) If there were no periods during which the CPMS, CEMS, or COMS was out-of-control as specified in §63.8(c)(7), a statement that there were no periods during which the CPMS, CEMS, or COMS was out-of-control during the reporting period.

(d) For each deviation from an emission limitation (emission limit, operating limit, opacity limit, and visible emission limit), you must include the information in paragraphs (c)(1) through (6) of this section, and the information in paragraphs (d)(1) through (12) of this section. This includes periods of startup, shutdown, and malfunction.

(1) The date and time that each malfunction started and stopped.

(2) The date and time that each CPMS, CEMS, or COMS was inoperative, except for zero (low-level) and high-level checks.

(3) The date, time and duration that each CPMS, CEMS, or COMS 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 startup, shutdown, or 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 startup, shutdown, control equipment problems, process problems, other known causes, and other unknown causes.

(7) A summary of the total duration of CPMS, CEMS, or COMS downtime during the reporting period and the total duration of CPMS, CEMS, or COMS downtime as a percent of the total source operating time during that reporting period.

(8) An identification of each air pollutant that was monitored at the affected source.

(9) A brief description of the process units.

(10) A brief description of the CPMS, CEMS, or COMS.

(11) The date of the latest CPMS, CEMS, or COMS certification or audit.

(12) A description of any changes in CPMS, CEMS, or COMS, processes, or controls since the last reporting period.

(e) Each affected source that has obtained a title V operating permit pursuant to 40 CFR part 70 or 40 CFR part 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 6 to 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), if the compliance report includes all required information concerning deviations from any emission limitation (including any operating limit), 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.

(f) If acceptable to both the Administrator and you, you may submit reports and notifications electronically.

§ 63.8694 What records must I keep?

(a) You must keep the following records:

(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 requirements in §63.10(b)(2)(xiv).

(2) The records in §63.6(e)(3)(iii) through (v) related to startup, shutdown, and malfunction.
§ 63.8695 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 on site for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to §63.10(b)(1). You can keep the records offsite for the remaining 3 years.

§ 63.8696 What parts of the General Provisions apply to me?

Table 7 to this subpart shows which parts of the General Provisions in §§63.1 through 63.15 apply to you.

§ 63.8697 Who implements and enforces this subpart?

(a) This subpart can be implemented and enforced by us, the U.S. Environmental Protection Agency (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, in addition to 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 if implementation and enforcement of this subpart is delegated.

(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 following authorities are retained by the Administrator of U.S. EPA:

(1) Approval of alternatives to the requirements in §§63.8681, 63.8682, 63.8683, 63.8684 through (c), 63.8686, 63.8687, 63.8688, 63.8689, 63.8690, and 63.8691.

(2) Approval of major changes to test methods under §63.7(e)(2)(i) and (f) and as defined in §63.90.

(3) Approval of major changes to monitoring under §63.8(f) and as defined in §63.90.

(4) Approval of major changes to recordkeeping and reporting under §63.10(f) and as defined in §63.90.

§ 63.8698 What definitions apply to this subpart?

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

Adhesive applicator means the equipment used to apply adhesive to roofing shingles for producing laminated or dimensional roofing shingles.

Asphalt flux means the organic residuum material from distillation of crude oil that is generally used in asphalt roofing manufacturing and paving and non-paving asphalt products.

Asphalt loading rack means the equipment at an asphalt processing facility used to transfer oxidized asphalt from a storage tank into a tank truck, railcar, or barge.

Asphalt processing facility means any facility engaged in the preparation of asphalt flux at stand-alone asphalt processing facilities, petroleum refineries, and asphalt roofing facilities. Asphalt preparation, called "blowing," is the oxidation of asphalt flux, achieved by bubbling air through the heated asphalt, to raise the softening point and to reduce penetration of the oxidized asphalt. An asphalt processing facility includes one or more asphalt flux blowing stills, asphalt flux storage tanks storing asphalt flux intended for processing in the blowing stills, oxidized asphalt storage tanks, and oxidized asphalt loading racks.

Asphalt roofing manufacturing facility means a facility consisting of one or
Environmental Protection Agency § 63.8698

more asphalt roofing manufacturing lines.

Asphalt roofing manufacturing line means the collection of equipment used to manufacture asphalt roofing products through a series of sequential process steps. The equipment that comprises an asphalt roofing manufacturing line varies depending on the type of substrate used (i.e., organic or inorganic) and the final product manufactured (e.g., roll roofing, laminated shingles). For example, an asphalt roofing manufacturing line that uses fiberglass mat as a substrate typically would not include a saturator/wet looper (or the saturator/wet looper could be bypassed if the line manufacturers multiple types of products). An asphalt roofing manufacturing line can include a saturator (including wet looper), coater, coating mixers, sealant applicators, adhesive applicators, and asphalt storage and process tanks. The number of asphalt roofing manufacturing lines at a particular facility is determined by the number of saturators (or coaters) operated in parallel. For example, a facility with two saturators (or coaters) operating in parallel would be considered to have two separate roofing manufacturing lines.

Asphalt storage tank means any tank used to store asphalt flux, oxidized asphalt, and modified asphalt, at asphalt roofing manufacturing facilities, petroleum refineries, and asphalt processing facilities. Storage tanks containing cutback asphalts (asphalts diluted with solvents to reduce viscosity for low temperature applications) and emulsified asphalts (asphalts dispersed in water with an emulsifying agent) are not subject to this subpart.

Blowing still means the equipment in which air is blown through asphalt flux to change the softening point and penetration rate of the asphalt flux, creating oxidized asphalt.

Boiler means any enclosed combustion device that extracts useful energy in the form of steam and is not an incinerator.

Coater means the equipment used to apply amended (filled or modified) asphalt to the top and bottom of the substrate (typically fiberglass mat) used to manufacture shingles and rolled roofing products.

Coating mixer means the equipment used to mix coating asphalt and a mineral stabilizer, prior to applying the stabilized coating asphalt to the substrate.

Combustion device means an individual unit of equipment such as a flare, incinerator, process heater, or boiler used for the combustion of organic hazardous air pollutant vapors.

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 (including any operating limit), 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 emission limitation (including any operating limit) or work practice standard in this subpart during startup, shutdown, or malfunction, regardless of whether or not such failure is permitted by this subpart.

Emission limitation means any emission limit, opacity limit, operating limit, or visible emission limit.

Group 1 asphalt loading rack means an asphalt loading rack that loads asphalt with a maximum temperature of 260 °C (500 °F) or greater and has a maximum true vapor pressure of 10.4 kiloPascals (kPa) (1.5 pounds per square inch absolute (psia)) or greater.

Group 2 asphalt loading rack means an asphalt loading rack that is not a Group 1 asphalt loading rack.

Group 1 asphalt storage tank means an asphalt storage tank that meets both of the following criteria:

(1) Has a capacity of 177 cubic meters (47,000 gallons) of asphalt or greater; and

(2) Stores asphalt at a maximum temperature of 260 °C (500 °F) or greater and has a maximum true vapor pressure of 10.4 kPa (1.5 psia) or greater.
Group 2 asphalt storage tank means any asphalt storage tank with a capacity of 1.93 megagrams (Mg) of asphalt or greater that is not a Group 1 asphalt storage tank.

Incinerator means an enclosed combustion device that is used for destroying organic compounds. Auxiliary fuel may be used to heat waste gas to combustion temperatures. Any energy recovery section present is not physically formed into one manufactured or assembled unit with the combustion section; rather, the energy recovery section is a separate section following the combustion section and the two are joined by ducts or connections carrying flue gas.

Maximum true vapor pressure means the equilibrium partial pressure exerted by the stored asphalt at its maximum storage temperature.

Modified asphalt means asphalt that has been mixed with polymer modifiers.

Oxidized asphalt means asphalt that has been prepared by passing air through liquid asphalt flux in a blowing still.

Process heater means an enclosed combustion device that primarily transfers heat liberated by burning fuel directly to process streams or to heat transfer liquids other than water.

Research and development equipment means any equipment whose primary purpose is to conduct research and development to develop new processes and products, where such equipment is operated under the close supervision of technically trained personnel and is not engaged in the manufacture of products for commercial sale in commerce, except in a de minimis manner.

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

Saturator means the equipment in which substrate (predominantly organic felt) is filled with asphalt. Saturators are predominantly used for the manufacture of saturated felt products. The term saturator includes the saturator and wet looper.

Sealant applicator means the equipment used to apply a sealant strip to a roofing product. The sealant strip is used to seal overlapping pieces of roofing product after they have been applied.

Work practice standard means any design, equipment, work practice, or operational standard, or combination thereof, that is promulgated pursuant to section 112(h) of the Clean Air Act.

Table 1 to Subpart LLLLL of Part 63—Emission Limitations

<table>
<thead>
<tr>
<th>For—</th>
<th>You must meet the following emission limitation—</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Each blowing still, Group 1 asphalt loading rack, and Group 1 asphalt storage tank at existing, new, and reconstructed asphalt processing facilities; and each Group 1 asphalt storage tank at existing, new, and reconstructed roofing manufacturing lines; and each coating mixer, saturator (including wet looper), coater, sealant applicator, adhesive applicator, and Group 1 asphalt storage tank at new and reconstructed asphalt roofing manufacturing lines.</td>
<td>a. Reduce total hydrocarbon mass emissions by 95 percent, or to a concentration of 20 ppmv, on a dry basis corrected to 3 percent oxygen; b. Route the emissions to a combustion device achieving a combustion efficiency of 99.5 percent; c. Route the emissions to a combustion device that does not use auxiliary fuel achieving a total hydrocarbon (THC) destruction efficiency of 95.8 percent; d. Route the emissions to a boiler or process heater with a design heat input capacity of 44 megawatts (MW) or greater; e. Introduce the emissions into the flame zone of a boiler or process heater; or f. Route emissions to a flare meeting the requirements of §63.11(b).</td>
</tr>
<tr>
<td>2. The total emissions from the coating mixer, saturator (including wet looper), coater, sealant applicator, and adhesive applicator at each existing asphalt roofing manufacturing line.</td>
<td>a. Limit particulate matter emissions to 0.04 kilograms emissions per megagram (kg/Mg) (0.08 pounds per ton, lb/ton) of asphalt shingle or mineral-surfaced roll roofing produced; or b. Limit particulate matter emissions to 0.4 kg/Mg (0.8 lb/ton) of saturated felt or smooth-surfaced roll roofing produced.</td>
</tr>
<tr>
<td>3. Each saturator (including wet looper) and coater at existing, new, and reconstructed asphalt roofing manufacturing lines.</td>
<td>a. Limit exhaust gases to 20 percent opacity; and b. Limit visible emissions from the emission capture system to 20 percent of any period of consecutive valid observations totaling 60 minutes.</td>
</tr>
</tbody>
</table>
For— You must meet the following emission limitation—

4. Each Group 2 asphalt storage tank at existing, new, and re-constructed asphalt processing facility and asphalt roofing manufacturing lines.  
   Limit exhaust gases to 0 percent opacity.  
   As an alternative to meeting the particulate matter and opacity limits, these emission sources may comply with the THC percent reduction or combustion efficiency standards.  
   The opacity limit can be exceeded for on consecutive 15-minute period in any 24-hour period when the storage tank transfer lines are being cleared. During this 15-minute period, the control device must not be bypassed. If the emissions from the asphalt storage tank are ducted to the saturator control device, the combined emissions from the saturator and storage tank must meet the 20 percent opacity limit (specified in 4.a of table 1) during this 15-minute period. At any other time, the opacity limit applies to Group 2 asphalt storage tanks.

**TABLE 2 TO SUBPART LLLLL OF PART 63—OPERATING LIMITS**

<table>
<thead>
<tr>
<th>For—</th>
<th>You must—</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Non-flare combustion devices with a design heat input capacity less than 44 MW or where the emissions are not introduced into the flame zone.</td>
<td>Maintain the 3-hour average combustion zone temperature at or above the operating limit established during the performance test. Meet the operating requirements specified in §63.11(b).</td>
</tr>
<tr>
<td>2. Flares.</td>
<td>a. Maintain the 3-hour average inlet gas temperature at or below the operating limit established during the performance test; and</td>
</tr>
<tr>
<td>3. Control devices used to comply with the particulate matter standards.</td>
<td>b. Maintain the 3-hour average pressure drop across the device at or below the operating limit established during the performance test.</td>
</tr>
<tr>
<td>4. Control devices other than combustion devices or devices used to comply with the particulate matter emission standards.</td>
<td>Maintain the approved monitoring parameters within the operating limits established during the performance test.</td>
</tr>
</tbody>
</table>

A 15-minute averaging period can be used as an alternative to the 3-hour averaging period for this parameter.

**TABLE 3 TO SUBPART LLLLL OF PART 63—REQUIREMENTS FOR PERFORMANCE TESTS**

<table>
<thead>
<tr>
<th>For—</th>
<th>You must—</th>
<th>Using—</th>
<th>According to the following requirements—</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. All particulate matter, total hydrocarbon, carbon monoxide, and carbon dioxide emission tests.</td>
<td>a. Select sampling port’s location and the number of traverse points.</td>
<td>i. EPA test method 1 or 1A in appendix A to part 60 of this chapter.</td>
<td>A. For demonstrating compliance with the total hydrocarbon percent reduction standard, the sampling sites must be located at the inlet and outlet of the control device and prior to any releases to the atmosphere. B. For demonstrating compliance with the particulate matter mass emission rate, THC destruction efficiency, THC outlet concentration, or combustion efficiency standards, the sampling sites must be located at the outlet of the control device and prior to any releases to the atmosphere.</td>
</tr>
<tr>
<td>2. All particulate matter and total hydrocarbon tests.</td>
<td>Determine velocity and volumetric flow rate.</td>
<td>EPA test method 2, 2A, 2C, 2D, 2F, or 2G, as appropriate, in appendix A to part 60 of this chapter.</td>
<td></td>
</tr>
<tr>
<td>3. All particulate matter and total hydrocarbon tests.</td>
<td>Determine the gas molecular weight used for flow rate determination.</td>
<td>EPA test method 3, 3A, 3B, as appropriate, in appendix A to part 60 of this chapter.</td>
<td></td>
</tr>
<tr>
<td>4. All particulate matter, total hydrocarbon, carbon monoxide, and carbon dioxide emission tests.</td>
<td>Measure moisture content of the stack gas.</td>
<td>EPA test method 4 in appendix A to part 60 of this chapter.</td>
<td></td>
</tr>
<tr>
<td>For—</td>
<td>You must—</td>
<td>Using—</td>
<td>According to the following requirements—</td>
</tr>
<tr>
<td>------</td>
<td>-----------</td>
<td>--------</td>
<td>------------------------------------------</td>
</tr>
<tr>
<td>5. All particulate matter emission tests.</td>
<td>Measure the asphalt processing rate or the asphalt roofing manufacturing rate and the asphalt content of the product manufactured, as appropriate.</td>
<td></td>
<td>For demonstrating compliance with the particulate matter standard, the performance tests must be conducted under normal operating conditions and while manufacturing the roofing product that is expected to result in the greatest amount of hazardous air pollutant emissions.</td>
</tr>
<tr>
<td>6. Each control device used to comply with the particulate matter emission standards.</td>
<td>Measure the concentration of particulate matter.</td>
<td>EPA test method 5A in appendix A to part 60 of this chapter.</td>
<td>Conduct opacity observations for at least 3 hours and obtain 30, 6-minute averages.</td>
</tr>
<tr>
<td>7. All opacity tests</td>
<td>Conduct opacity observations.</td>
<td>EPA test method 9 in appendix A to part 60 of this chapter.</td>
<td>Modify EPA test method 22 such that readings are recorded every 15 seconds for a period of consecutive observations totaling 60 minutes.</td>
</tr>
<tr>
<td>8. All visible emission tests.</td>
<td>Conduct visible emission observations.</td>
<td>EPA test method 22 in appendix A to part 60 of this chapter.</td>
<td></td>
</tr>
<tr>
<td>9. Each combustion device used to comply with the combustion efficiency or THC standards.</td>
<td>a. Measure the concentration of carbon dioxide. b. Measure the concentration of carbon monoxide. c. Measure the concentration of total hydrocarbons.</td>
<td>EPA test method 3A in appendix A to part 60 of this chapter. EPA test method 10 in appendix A to part 60 of this chapter. EPA test method 25A in appendix A to part 60 of this chapter.</td>
<td></td>
</tr>
<tr>
<td>10. Each control device used to comply with the THC reduction efficiency or outlet concentration standards.</td>
<td>Measure the concentration of total hydrocarbons.</td>
<td>EPA test method 25A in appendix A to part 60 of this chapter.</td>
<td></td>
</tr>
<tr>
<td>11. Each combustion device.</td>
<td>Establish a site-specific combustion zone temperature limit.</td>
<td>Data from the CPMS and the applicable performance test method(s).</td>
<td>You must collect combustion zone temperature data every 15 minutes during the entire period of the initial 3-hour performance test, and determine the average combustion zone temperature over the 3-hour performance test by computing the average of all of the 15-minute readings.</td>
</tr>
<tr>
<td>12. Each control device used to comply with the particulate matter emission standards.</td>
<td>Establish a site-specific inlet gas temperature limit; and establish a site-specific limit for the pressure drop across the device.</td>
<td>Data from the CPMS and the applicable performance test method(s).</td>
<td>You must collect the inlet gas temperature and pressure drop(^a) data every 15 minutes during the entire period of the initial 3-hour performance test, and determine the average inlet gas temperature and pressure drop(^b) over the 3-hour performance test by computing the average of all of the 15-minute readings.</td>
</tr>
<tr>
<td>13. Each control device other than a combustion device or device used to comply with the particulate matter emission standards.</td>
<td>Establish site-specific monitoring parameters.</td>
<td>Process data and data from the CPMS and the applicable performance test method(s).</td>
<td>You must collect monitoring parameter data every 15 minutes during the entire period of the initial 3-hour performance test, and determine the average monitoring parameter values over the 3-hour performance test by computing the average of all of the 15-minute readings.</td>
</tr>
<tr>
<td>14. Each flare used to comply with the THC percent reduction or PM emission limits.</td>
<td>Assure that the flare is operated and maintained in conformance with its design.</td>
<td>The requirements of § 63.11(b).</td>
<td></td>
</tr>
</tbody>
</table>

\(^a\) As specified in § 63.86, you may request that data from a previously-conducted emission test serve as documentation of conformance with the emission standards and operating limits of this subpart.

\(^b\) Performance tests are not required if: (1) The emissions are routed to a boiler or process heater with a design heat input capacity of 44 MW or greater; or (2) the emissions are introduced into the flame zone of a boiler or process heater.

\(^c\) As an alternative to monitoring the pressure drop across the control device, owners or operators using an ESP to achieve compliance with the emission limits specified in Table 1 of this subpart can monitor the voltage to the ESP.
### Table 4 to Subpart LLLLL of Part 63—Initial Compliance With Emission Limitations

<table>
<thead>
<tr>
<th>For—</th>
<th>For the following emission limitation—</th>
<th>You have demonstrated initial compliance if—</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1.</strong> Each blowing still, Group 1 asphalt loading rack, and Group 1 asphalt storage tank, at existing, new, and reconstructed asphalt processing facilities.</td>
<td>a. Reduce total hydrocarbon mass emissions by 95 percent or to a concentration of 20 ppmv, on a dry basis corrected to 3 percent oxygen.</td>
<td>i. The total hydrocarbon emissions, determined using the equations in §63.8687 and the test methods and procedures in Table 3 to this subpart, over the period of the performance test are reduced by at least 95 percent by weight or to a concentration of 20 ppmv, on a dry basis corrected to 3 percent oxygen; and ii. You have a record of the average control device operating parameters over the performance test during which emissions were reduced according to 1.a.i. of this table.</td>
</tr>
<tr>
<td></td>
<td>b. Route the emissions to a combustion device achieving a combustion efficiency of 99.5 percent.</td>
<td>i. The combustion efficiency of the combustion device, determined using the equations in §63.8687 and the test methods and procedures in Table 3 to this subpart, over the period of the performance test is at least 99.5 percent; and ii. You have a record of the average combustion zone temperature and carbon monoxide, carbon dioxide, and total hydrocarbon outlet concentrations over the performance test during which the combustion efficiency was at least 99.5 percent.</td>
</tr>
<tr>
<td></td>
<td>c. Route the emissions to a combustion device that does not use auxiliary fuel achieving a THC destruction efficiency of 95.8 percent.</td>
<td>i. The THC destruction efficiency of the combustion device, determined using the equations in §63.8687 and the test methods and procedures in Table 3 to this subpart, over the period of the performance test is at least 95.8 percent; and ii. You have a record of the average combustion zone temperature and carbon monoxide, carbon dioxide, and total hydrocarbon outlet concentrations over the performance test during which the THC destruction efficiency was at least 95.8 percent.</td>
</tr>
<tr>
<td></td>
<td>d. Route emissions to a boiler or process heater with a design heat input capacity of 44 MW or greater.</td>
<td>You have a record of the boiler or process heater design heat capacity.</td>
</tr>
<tr>
<td></td>
<td>e. Introduce the emissions into the flame zone of a boiler or process heater.</td>
<td>You have a record that shows the emissions are being introduced into the boiler or process heater flame zone.</td>
</tr>
<tr>
<td></td>
<td>f. Route emissions to a flare meeting the requirements of §63.11(b).</td>
<td>You have a record of the flare design and operating requirements.</td>
</tr>
<tr>
<td><strong>2.</strong> Each coating mixer, saturator (including wet looper), coater, sealant applicator, adhesive applicator, and Group 1 asphalt storage tank at new and reconstructed asphalt roofing manufacturing lines.</td>
<td>a. Reduce total hydrocarbon mass emissions by 95 percent or to a concentration of 20 ppmv, on a dry basis corrected to 3 percent oxygen.</td>
<td>See 1.a.i. and ii. of this table.</td>
</tr>
<tr>
<td></td>
<td>b. Route the emissions to a combustion device achieving a combustion efficiency of 99.5 percent.</td>
<td>See 1.b.i. and ii. of this table.</td>
</tr>
<tr>
<td></td>
<td>c. Route the emissions to a combustion device that does not use auxiliary fuel achieving a THC destruction efficiency of 95.8 percent.</td>
<td>See 1.c.i. and ii. of this table.</td>
</tr>
<tr>
<td></td>
<td>d. Route emissions to a boiler or process heater with a design heat input capacity of 44 MW or greater.</td>
<td>See 1.d. of this table.</td>
</tr>
<tr>
<td></td>
<td>e. Introduce the emissions into the flame zone of a boiler or process heater.</td>
<td>See 1.e. of this table.</td>
</tr>
<tr>
<td></td>
<td>f. Route emissions to a flare meeting the requirements of §63.11(b).</td>
<td>See 1.f. of this table.</td>
</tr>
</tbody>
</table>
### TABLE 5 TO SUBPART LLLLL OF PART 63—CONTINUOUS COMPLIANCE WITH OPERATING LIMITS A

<table>
<thead>
<tr>
<th>For—</th>
<th>For the following operating limit—</th>
<th>You must demonstrate continuous compliance by—</th>
</tr>
</thead>
<tbody>
<tr>
<td>3. The total emissions from the coating mixer, saturator (including wet looper), coater, sealant applicator, and adhesive applicator at each existing asphalt roofing manufacturing line.</td>
<td>a. Limit PM emissions to 0.04 kg/Mg (0.08 lb/ton) of asphalt shingle or mineral-surfaced roll roofing produced. b. Limit PM emissions to 0.4 kg/Mg (0.8 lb/ton) of saturated felt or smooth-surfaced roll roofing produced.</td>
<td>i. The PM emissions, determined using the equations in §63.8687 and the test methods and procedures in Table 3 to this subpart, over the period of the performance test are no greater than the applicable emission limitation; and ii. You have a record of the average control device a or process parameters over the performance test during which the particulate matter emissions were no greater than the applicable emission limitation. See 3.a.i. and ii. of this table.</td>
</tr>
<tr>
<td>4. Each saturator (including wet looper) and coater at an existing, new, or reconstructed asphalt roofing manufacturing line.</td>
<td>a. Limit visible emissions from the emissions capture system to 20 percent of any period of consecutive valid observations totaling 60 minutes. b. Limit opacity emissions to 20 percent.</td>
<td>The visible emissions, measured using EPA test method 22, for any period of consecutive valid observations totaling 60 minutes during the initial compliance period described in §63.8686(b) do not exceed 20 percent.</td>
</tr>
<tr>
<td>5. Each Group 2 asphalt storage tank at existing, new, and reconstructed asphalt processing facilities and asphalt roofing manufacturing lines.</td>
<td>Limit exhaust gases to 0 percent opacity.</td>
<td>The opacity, measured using EPA test method 9, for each of the first 30 6-minute averages during the initial compliance period described in §63.8686(b) does not exceed 20 percent.</td>
</tr>
</tbody>
</table>

* If you use a CEMS or COMS to demonstrate compliance with the emission limits, you are not required to record control device operating parameters.

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

<table>
<thead>
<tr>
<th>For—</th>
<th>For the following emission limitation—</th>
<th>You have demonstrated initial compliance if—</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Each non-flare combustion device.</td>
<td>a. Maintain the 3-hour c average combustion zone temperature at or above the operating limit establishing during the performance test.</td>
<td>i. Passing the emissions through the control device; and ii. Collecting the combustion zone temperature data according to §63.8688(b); and iii. Reducing combustion zone temperature data to 3-hour c averages according to calculations in Table 3 to this subpart; and iv. Maintaining the 3-hour c average combustion zone temperature within the level established during the performance test.</td>
</tr>
<tr>
<td>2. Each flare</td>
<td>Meet the operating requirements specified in §63.11(b).</td>
<td>The flare pilot light must be present at all times and the flare must be operating at all times that emissions may be vented to it.</td>
</tr>
<tr>
<td>3. Control devices used to comply with the particulate matter emission standards.</td>
<td>a. Maintain the 3-hour c average inlet gas temperature and pressure drop across device a at or below the operating limits established during the performance test.</td>
<td>i. Passing the emissions through the control device; and ii. Collecting the inlet gas temperature and pressure drop data according to §63.8688 (b) and (c); and iii. Reducing inlet gas temperature and pressure drop data to 3-hour c averages according to calculations in Table 3 to this subpart; and iv. Maintaining the 3-hour c average inlet gas temperature and pressure drop within the level established during the performance test.</td>
</tr>
<tr>
<td>4. Control devices other than combustion devices or devices used to comply with the particulate matter emission.</td>
<td>a. Maintain the monitoring parameters within the operating limits established during the performance test.</td>
<td>i. Passing the emissions through the devices; ii. Collecting the monitoring parameter data according to §63.8688(d); and iii. Reducing the monitoring parameter data to 3-hour c averages according to calculations in Table 3 to this subpart; and iv. Maintaining the monitoring parameters within the level established during the performance test.</td>
</tr>
</tbody>
</table>
Continuous parameter monitoring is not required if (1) the emissions are routed to a boiler or process heater with a design heat input capacity of 44 MW or greater; or (2) the emissions are introduced into the flame zone of a boiler or process heater.

A 15-minute averaging period can be used as an alternative to the 3-hour averaging period for this parameter.

As an alternative to monitoring the pressure drop across the control device, owners or operators using an ESP to achieve compliance with the emission limits specified in Table 1 of this subpart can monitor the voltage to the ESP. If this option is selected, the ESP voltage must be maintained at or above the operating limit established during the performance test.

[68 FR 24577, May 7, 2003, as amended at 70 FR 28365, May 17, 2005]

Table 6 to Subpart LLLLL of Part 63—Requirements for Reports

<table>
<thead>
<tr>
<th>You must submit—</th>
<th>The report must contain—</th>
<th>You must submit the report—</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. An initial notification</td>
<td>The information in § 63.9(b)</td>
<td>According to the requirements in § 63.9(b).</td>
</tr>
<tr>
<td>2. A notification of performance test</td>
<td>A written notification of the intent to conduct a performance test.</td>
<td>At least 60 calendar days before the performance test is scheduled to begin, as required in § 63.9(e).</td>
</tr>
<tr>
<td>3. A notification of opacity and visible emission observations.</td>
<td>A written notification of the intent to conduct opacity and visible emission observations.</td>
<td>According to the requirements in § 63.9(h)(2) through (5), as applicable.</td>
</tr>
<tr>
<td>4. Notification of compliance status</td>
<td>The information in § 63.9(h)(2) through (5), as applicable.</td>
<td>Semiannually according to the requirements in § 63.8693(b).</td>
</tr>
<tr>
<td>5. A compliance report</td>
<td>a. A statement that there were no deviations from the emission limitations during the reporting period, if there are no deviations from any emission limitations (emission limit, operating limit, opacity limit, and visible emission limit) that apply to you.</td>
<td>Semiannually according to the requirements in § 63.8693(b).</td>
</tr>
<tr>
<td></td>
<td>b. If there were no periods during which the CPMS, CEMS, or COMS was out-of-control as specified in § 63.8(c)(7), a statement that there were no periods during which the CPMS, CEMS, or COMS was out-of-control during the reporting period.</td>
<td>Semiannually according to the requirements in § 63.8693(b).</td>
</tr>
<tr>
<td></td>
<td>c. If you have a deviation from any emission limitation (emission limit, operating limit, opacity limit, and visible emission limit), the report must contain the information in § 63.8693(c). If there were periods during which the CPMS, CEMS, or COMS was out-of-control, as specified in § 63.8(c)(7), the report must contain the information in § 63.8693(d).</td>
<td>Semiannually according to the requirements in § 63.8693(b).</td>
</tr>
<tr>
<td></td>
<td>d. If you had a startup, shutdown, or malfunction during the reporting period and you took actions consistent with your startup, shutdown, and malfunction plan, the compliance report must include the information in § 63.10(d)(5)(ii).</td>
<td>Semiannually according to the requirements in § 63.8693(b).</td>
</tr>
<tr>
<td>6. An immediate startup, shutdown, and malfunction report if you have a startup, shutdown, or malfunction during the reporting period and actions taken were not consistent with your startup, shutdown, and malfunction plan.</td>
<td>The information in § 63.10(d)(5)(ii)</td>
<td>By fax or telephone within 2 working days after starting actions inconsistent with the plan followed by a letter within 7 working days after the end of the event unless you have made alternative arrangements with the permitting authority.</td>
</tr>
</tbody>
</table>

Table 7 to Subpart LLLLL of Part 63—Applicability of General Provisions to Subpart LLLLL

<table>
<thead>
<tr>
<th>Citation</th>
<th>Subject</th>
<th>Brief description</th>
<th>Applies to subpart LLLLL</th>
</tr>
</thead>
<tbody>
<tr>
<td>§63.1</td>
<td>Applicability</td>
<td>Initial Applicability Determination; Applicability After Standard Established; Permit Requirements; Extensions, Notifications.</td>
<td>Yes.</td>
</tr>
<tr>
<td>§63.2</td>
<td>Definitions</td>
<td>Definitions for part 63 standards.</td>
<td>Yes.</td>
</tr>
<tr>
<td>§63.3</td>
<td>Units and Abbreviations</td>
<td>Units and abbreviations for part 63 standards.</td>
<td>Yes.</td>
</tr>
<tr>
<td>§63.4</td>
<td>Prohibited Activities</td>
<td>Prohibited Activities; Compliance date; Circumvention, Severability.</td>
<td>Yes.</td>
</tr>
<tr>
<td>§63.5</td>
<td>Construction/Reconstruction</td>
<td>Applicability; applications; approvals.</td>
<td>Yes.</td>
</tr>
<tr>
<td>Citation</td>
<td>Subject</td>
<td>Description</td>
<td>Applies to subpart LLLLL</td>
</tr>
<tr>
<td>----------</td>
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<td>--------------------------</td>
</tr>
<tr>
<td>§63.6(a)</td>
<td>Applicability</td>
<td>GP apply unless compliance extension GP apply to area sources that become major.</td>
<td>Yes.</td>
</tr>
<tr>
<td>§63.6(b)(1)–(4)</td>
<td>Compliance Dates for New and Reconstructed sources.</td>
<td>Standards apply at effective date; 3 years after effective date; upon startup; 10 years after construction or reconstruction commences for section 112(f).</td>
<td>Yes.</td>
</tr>
<tr>
<td>§63.6(b)(5)</td>
<td>Notification</td>
<td>Must notify if commenced construction or reconstruction after proposal.</td>
<td>Yes.</td>
</tr>
<tr>
<td>§63.6(b)(6)</td>
<td>(Reserved).</td>
<td></td>
<td></td>
</tr>
<tr>
<td>§63.6(b)(7)</td>
<td>Compliance Dates for New and Reconstructed Area Sources That Become Major.</td>
<td>Area sources that become major must comply with major source standards immediately upon becoming major, regardless of whether required to comply when they were an area source.</td>
<td>Yes.</td>
</tr>
<tr>
<td>§63.6(c)(1)–(2)</td>
<td>Compliance Dates for Existing Sources.</td>
<td>1. Comply according to date in subpart, which must be no later than 3 years after effective date. 2. For section 112(f) standards, comply within 90 days of effective date unless compliance extension has been granted.</td>
<td>Yes.</td>
</tr>
<tr>
<td>§63.6(c)(3)–(4)</td>
<td>(Reserved).</td>
<td></td>
<td></td>
</tr>
<tr>
<td>§63.6(c)(5)</td>
<td>Compliance Dates for Existing Area Sources That Become Major.</td>
<td>Area sources that become major must comply with major source standards by date indicated in subpart or by equivalent time period (for example, 3 years).</td>
<td>Yes.</td>
</tr>
<tr>
<td>§63.6(d)</td>
<td>Operation &amp; Maintenance</td>
<td>1. Operate to minimize emissions at all times. 2. Correct malfunctions as soon as practicable. 3. Operation and maintenance requirements independently enforceable; information Administrator will use to determine if operation and maintenance requirements were met.</td>
<td>Yes.</td>
</tr>
<tr>
<td>§63.6(e)(2)</td>
<td>Startup, Shutdown, and Malfunction (SSM) Plan (SSMP).</td>
<td>1. Requirement for SSM and startup, shutdown, malfunction plan.</td>
<td>Yes.</td>
</tr>
<tr>
<td>§63.6(e)(3)</td>
<td>Compliance Except During SSM</td>
<td></td>
<td></td>
</tr>
<tr>
<td>§63.6(f)(1)–(3)</td>
<td>Methods for Determining Compliance</td>
<td>Compliance based on performance test, operation and maintenance plans, records, inspection.</td>
<td>Yes.</td>
</tr>
<tr>
<td>§63.6(g)(1)–(3)</td>
<td>Alternative Nonopacity Standard</td>
<td>Procedures for getting an alternative nonopacity standard.</td>
<td>Yes.</td>
</tr>
<tr>
<td>§63.6(h)</td>
<td>Opacity/Visible Emission (VE) Standards.</td>
<td>Requirements for opacity and VE limits.</td>
<td>Yes.</td>
</tr>
<tr>
<td>§63.6(h)(1)</td>
<td>Compliance with Opacity/VE Standards.</td>
<td>You must comply with opacity/VE emission limitations at all times except during SSM.</td>
<td>Yes.</td>
</tr>
<tr>
<td>§63.6(h)(2)(i)</td>
<td>Determining Compliance with Opacity/VE Standards.</td>
<td>If standard does not state test method, use EPA test method 9, 40 CFR 60, appendix A for opacity and EPA test method 22, 40 CFR 60, appendix A for VE.</td>
<td>No. The test methods for opacity and visible emissions are specified in §63.8687.</td>
</tr>
<tr>
<td>§63.6(h)(2)(ii)</td>
<td>Using Previous Tests to Demonstrate Compliance with Opacity/VE Standards.</td>
<td>Criteria for when previous opacity/VE testing can be used to show compliance with this rule.</td>
<td>Yes.</td>
</tr>
<tr>
<td>§63.6(h)(3)</td>
<td>Notification of Opacity/VE Observation Data.</td>
<td>Must notify Administrator of anticipated date of observation.</td>
<td>Yes.</td>
</tr>
<tr>
<td>§63.6(h)(5)(i), (ii)–(v)</td>
<td>Conducting Opacity/VE Observations</td>
<td>Dates and Schedule for conducting opacity/VE observations.</td>
<td>Yes.</td>
</tr>
<tr>
<td>§63.6(h)(5)(ii)</td>
<td>Opacity Test Duration and Averaging Times.</td>
<td>Must have at least 3 hours of observation with thirty 6-minute averages.</td>
<td>Yes.</td>
</tr>
<tr>
<td>Citation</td>
<td>Subject</td>
<td>Brief description</td>
<td>Applies to subpart LLLL</td>
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</tr>
<tr>
<td>§63.6(h)(6)</td>
<td>Records of Conditions During Opacity/VE Observations.</td>
<td>Must keep records available and allow Administrator to inspect.</td>
<td>Yes</td>
</tr>
<tr>
<td>§63.6(h)(7)(i)</td>
<td>Report COMS Monitoring Data from Performance Test.</td>
<td>Must submit COMS data with other performance test data.</td>
<td>Yes, if COMS used</td>
</tr>
<tr>
<td>§63.6(h)(7)(ii)</td>
<td>Using COMS instead of EPA test method 9, 40 CFR 60, appendix A.</td>
<td>Can submit COMS data instead of EPA test method 9, 40 CFR 60, appendix A results even if rule requires EPA test method 9, 40 CFR 60, appendix A, but must notify Administrator before performance test. Yes, if COMS used.</td>
<td></td>
</tr>
<tr>
<td>§63.6(h)(7)(iii)</td>
<td>Averaging time for COMS during performance test.</td>
<td>To determine compliance, must reduce COMS data to 6-minute averages.</td>
<td>Yes, if COMS used</td>
</tr>
<tr>
<td>§63.6(h)(7)(iv)</td>
<td>COMS requirements</td>
<td>Owner/operator must demonstrate that COMS performance evaluations are conducted according to §63.8(e), COMS are properly maintained and operated according to §63.8(c) and data quality as §63.8(d). Yes, if COMS used.</td>
<td></td>
</tr>
<tr>
<td>§63.6(h)(7)(v)</td>
<td>Determining Compliance with Opacity/VE Standards.</td>
<td>COMS is probative but not conclusive evidence of compliance with opacity standard, even if EPA test method 9, 40 CFR 60, appendix A observation shows otherwise. Requirements for COMS to be probative evidence, proper maintenance, meeting PS 1, and data have not been altered. Yes, if COMS used.</td>
<td></td>
</tr>
<tr>
<td>§63.6(h)(8)</td>
<td>Determining Compliance with Opacity/VE Standards.</td>
<td>Administrator will use all COMS, EPA test method 9, 40 CFR 60, appendix A, and EPA test method 22, 40 CFR 60, appendix A results, as well as information about operation and maintenance to determine compliance. Yes.</td>
<td></td>
</tr>
<tr>
<td>§63.6(h)(9)</td>
<td>Adjusted Opacity Standard</td>
<td>Procedures for Administrator to adjust an opacity standard.</td>
<td>Yes</td>
</tr>
<tr>
<td>§63.6(i)</td>
<td>Compliance Extension</td>
<td>Procedures and criteria for Administrator to grant compliance extension.</td>
<td>Yes</td>
</tr>
<tr>
<td>§63.6(j)</td>
<td>Presidential Compliance Exemption</td>
<td>President may exempt source category from requirement to comply with rule.</td>
<td>Yes</td>
</tr>
<tr>
<td>§63.7(a)(1)</td>
<td>Performance Test Dates</td>
<td>Dates for conducting initial performance testing and other compliance demonstrations. Must conduct 180 days after first subject to rule. Yes.</td>
<td></td>
</tr>
<tr>
<td>§63.7(a)(2)</td>
<td>Section 114 Authority</td>
<td>Administrator may require a performance test under CAA section 114 at any time.</td>
<td>Yes</td>
</tr>
<tr>
<td>§63.7(b)(1)</td>
<td>Notification of Performance Test</td>
<td>Must notify Administrator 60 days before the test.</td>
<td>Yes</td>
</tr>
<tr>
<td>§63.7(b)(2)</td>
<td>Notification of Rescheduling</td>
<td>If rescheduling a performance test is necessary, must notify Administrator 5 days before scheduled date of rescheduled date. Yes.</td>
<td></td>
</tr>
<tr>
<td>§63.7(c)</td>
<td>Quality Assurance/Test Plan</td>
<td>1. Requirement to submit site-specific test plan 60 days before the test or on date Administrator agrees with: Yes.</td>
<td></td>
</tr>
<tr>
<td>§63.7(d)</td>
<td>Testing Facilities</td>
<td>Requirements for testing facilities 2. Test plan approval procedures 3. Performance audit requirements 4. Internal and external QA procedures for testing. Yes.</td>
<td></td>
</tr>
<tr>
<td>§63.7(e)(1)</td>
<td>Conditions for Conducting Performance Tests.</td>
<td>1. Performance tests must be conducted under representative conditions. Cannot conduct performance tests during SSM. Yes.</td>
<td></td>
</tr>
<tr>
<td>§63.7(e)(2)</td>
<td>Conditions for Conducting Performance Tests.</td>
<td>Must conduct according to rule and EPA test methods unless Administrator approves alternative. Yes.</td>
<td></td>
</tr>
<tr>
<td>Citation</td>
<td>Subject</td>
<td>Brief description</td>
<td>Applies to subpart LLLL</td>
</tr>
<tr>
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</tr>
<tr>
<td>§63.7(e)(3)</td>
<td>Test Run Duration</td>
<td>1. Must have three test runs of at least 1 hour each.</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2. Compliance is based on arithmetic mean of three runs.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>3. Conditions when data from an additional test run can be used.</td>
<td></td>
</tr>
<tr>
<td>§63.7(f)</td>
<td>Alternative Test Method</td>
<td>Procedures by which Administrator can grant approval to use an alternative test method.</td>
<td>Yes</td>
</tr>
<tr>
<td>§63.7(g)</td>
<td>Performance Test Data Analysis</td>
<td>1. Must include raw data in performance test report.</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2. Must submit performance test data 60 days after end of test with the</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Notification of Compliance Status.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>3. Keep data for 5 years</td>
<td></td>
</tr>
<tr>
<td>§63.7(h)</td>
<td>Waiver of Tests</td>
<td>Procedures for Administrator to waive performance test.</td>
<td>Yes</td>
</tr>
<tr>
<td>§63.8(a)(1)</td>
<td>Applicability of Monitoring Requirements</td>
<td>Subject to all monitoring requirements in standard.</td>
<td>Yes</td>
</tr>
<tr>
<td>§63.8(a)(2)</td>
<td>Performance Specifications</td>
<td>Performance Specifications in appendix B of part 60 apply.</td>
<td>Yes, if CEMS used</td>
</tr>
<tr>
<td>§63.8(a)(3)</td>
<td>Monitoring with Flares</td>
<td>Unless your rule says otherwise, the requirements for flares in §63.11 apply.</td>
<td>Yes</td>
</tr>
<tr>
<td>§63.8(b)(1)</td>
<td>Monitoring</td>
<td>Maintain monitoring system in a manner consistent with good air pollution control</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td></td>
<td>practices.</td>
<td></td>
</tr>
<tr>
<td>§63.8(c)(1)(i)</td>
<td>Routine and predictable CMS malfunction</td>
<td>1. Keep parts for routine repairs readily available.</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2. Reporting requirements for CMS malfunction when action is described in SSM plan.</td>
<td></td>
</tr>
<tr>
<td>§63.8(c)(1)(ii)</td>
<td></td>
<td>Reporting requirements for CMS malfunction when action is not described in SSM plan.</td>
<td></td>
</tr>
<tr>
<td>§63.8(c)(1)(iii)</td>
<td>Compliance with Operation and Maintenance</td>
<td>1. How Administrator determines if source complying with operation and</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td></td>
<td>maintenance requirements.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>2. Review of source O&amp;M procedures, records, manufacturer’s instructions,</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>recommendations, and inspection of monitoring system.</td>
<td></td>
</tr>
<tr>
<td>§63.8(c)(2)–(3)</td>
<td>Monitoring System Installation</td>
<td>1. Must install to get representative emission and parameter measurements.</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2. Must verify operational status before or at performance test.</td>
<td></td>
</tr>
<tr>
<td>§63.8(c)(4)</td>
<td>CMS Requirements</td>
<td>CMS must be operating except during breakdown, out-of-control, repair,</td>
<td>No; §63.8690 specifies</td>
</tr>
<tr>
<td></td>
<td></td>
<td>maintenance, and high-level calibration drifts.</td>
<td>the CMS requirements.</td>
</tr>
<tr>
<td>§63.8(c)(4)(i)–(ii)</td>
<td></td>
<td>1. CMS must have a minimum of one cycle of sampling and analysis for each</td>
<td>Yes, if COMS used</td>
</tr>
<tr>
<td></td>
<td></td>
<td>successive 10-second period and one cycle of data recording for each successive</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>6-minute period.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>2. CEMS must have a minimum of one cycle of operation for each successive 15-minute</td>
<td></td>
</tr>
<tr>
<td>Citation</td>
<td>Subject</td>
<td>Brief description</td>
<td>Applies to subpart LLLLL</td>
</tr>
<tr>
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</tr>
<tr>
<td>§ 63.8(c)(5)</td>
<td>COMS Minimum Procedures</td>
<td>COMS minimum procedures</td>
<td>Yes</td>
</tr>
<tr>
<td>§ 63.8(c)(6)</td>
<td>CMS Requirements</td>
<td>Zero and High level calibration check requirements.</td>
<td>No; § 63.8688 specifies the CMS requirements.</td>
</tr>
<tr>
<td>§ 63.8(c)(7)–(8)</td>
<td>CMS Requirements</td>
<td>Out-of-control periods, including reporting.</td>
<td>Yes</td>
</tr>
<tr>
<td>§ 63.8(d)</td>
<td>CMS Quality Control</td>
<td>1. Requirements for CMS quality control, including calibration, etc. 2. Must keep quality control plan on record for the life of the affected source. 3. Keep old versions for 5 years after revisions.</td>
<td>No; § 63.8688 specifies the CMS requirements.</td>
</tr>
<tr>
<td>§ 63.8(e)</td>
<td>CMS Performance Evaluation</td>
<td>Notification, performance evaluation test plan, reports.</td>
<td>No; § 63.8688 specifies the CMS requirements.</td>
</tr>
<tr>
<td>§ 63.8(f)(1)–(5)</td>
<td>Alternative Monitoring Method</td>
<td>Procedures for Administrator to approve alternative monitoring.</td>
<td>Yes</td>
</tr>
<tr>
<td>§ 63.8(f)(6)</td>
<td>Alternative to Relative Accuracy Test</td>
<td>Procedures for Administrator to approve alternative relative accuracy tests for CEMS.</td>
<td>Yes, if CEMS used.</td>
</tr>
<tr>
<td>§ 63.8(g)(1)–(4)</td>
<td>Data Reduction</td>
<td>1. COMS 6-minute averages calculated over at least 36 evenly spaced data points. 2. CEMS 1-hour averages computed over at least 4 equally spaced data points.</td>
<td>Yes, if CEMS or COMS used.</td>
</tr>
<tr>
<td>§ 63.8(g)(5)</td>
<td>Data Reduction</td>
<td>Data that cannot be used in computing averages for CMS.</td>
<td>No; § 63.8690 specifies the CMS requirements.</td>
</tr>
<tr>
<td>§ 63.9(a)</td>
<td>Notification Requirements</td>
<td>Applicability and State Delegation</td>
<td>Yes</td>
</tr>
<tr>
<td>§ 63.9(b)(1)–(5)</td>
<td>Initial Notifications</td>
<td>1. Submit notification 120 days after effective date. 2. Notification of intent to construct/reconstruct; notification of commencement of construct/reconstruct; notification of startup.</td>
<td>Yes</td>
</tr>
<tr>
<td>§ 63.9(c)</td>
<td>Request for Compliance Extension</td>
<td>3. Contents of each request if cannot comply by date or if installed Best Achievable Control Technology (BACT)/Lowest Achievable Emission Rate (LAER).</td>
<td>Yes</td>
</tr>
<tr>
<td>§ 63.9(d)</td>
<td>Notification of Special Compliance Requirements for New Source.</td>
<td>For sources that commence construction between proposal and promulgation and want to comply 3 years after effective date.</td>
<td>Yes</td>
</tr>
<tr>
<td>§ 63.9(e)</td>
<td>Notification of Performance Test</td>
<td>Notify Administrator 60 days prior to test.</td>
<td>Yes</td>
</tr>
<tr>
<td>§ 63.9(f)</td>
<td>Notification of VE/Opacity Test</td>
<td>Notify Administrator 30 days prior to test.</td>
<td>No; § 63.8692 specifies the CMS notification requirements.</td>
</tr>
<tr>
<td>§ 63.9(g)</td>
<td>Additional Notifications When Using CMS.</td>
<td>1. Notification of performance evaluation. 2. Notification using COMS data. 3. Notification that the criterion for use of alternative to relative accuracy testing was exceeded.</td>
<td>Yes</td>
</tr>
<tr>
<td>§ 63.9(h)(1)–(6)</td>
<td>Notification of Compliance Status</td>
<td>1. Contents. 2. Due 60 days after end of performance test or other compliance demonstration, except for opacity/VE, which are due 30 days after. 3. When to submit to Federal vs. State authority.</td>
<td>Yes</td>
</tr>
<tr>
<td>§ 63.9(i)</td>
<td>Adjustment of Submittal Deadlines</td>
<td>Procedures for Administrator to approve change in dates when notifications must be submitted.</td>
<td>Yes</td>
</tr>
<tr>
<td>§ 63.9(j)</td>
<td>Change in Previous Information</td>
<td>Must submit within 15 days after the change.</td>
<td>Yes</td>
</tr>
<tr>
<td>§ 63.10(a)</td>
<td>Recordkeeping/Reporting</td>
<td>1. Applies to all, unless compliance extension. 2. When to submit to Federal vs. State authority. 3. Procedures for owners of more than 1 source.</td>
<td>Yes</td>
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<tr>
<td>Citation</td>
<td>Subject</td>
<td>Brief description</td>
<td>Applies to subpart LLLLL</td>
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| §63.10(b)(1) | Recordskeeping/Reporting | 1. General Requirements
2. Keep all records readily available.
3. Keep for 5 years. | Yes. |
| §63.10(b)(2)(i)–(v) | Records related to Startup, Shutdown, and Malfunction. | 1. Occurrence of each of operation (process equipment).
2. Occurrence of each malfunction of air pollution equipment.
3. Maintenance on air pollution control equipment.
4. Actions during startup, shutdown, and malfunction. | Yes. |
| §63.10(b)(2)(vi) and (x-xii) | CMS Records | 1. Malfunctions, inoperative, out-of-control.
2. Calibration checks
3. Adjustments, maintenance | Yes. |
| §63.10(b)(2)(vii)–(xix) | Records | 1. Measurements to demonstrate compliance with emission limitations.
2. Performance test, performance evaluation, and visible emission observation results.
3. Measurements to determine conditions of performance tests and performance evaluations. | Yes. |
| §63.10(b)(2)(xvii) | Records | Records when under waiver | Yes. |
| §63.10(b)(2)(xviii) | Records | Records when using alternative to relative accuracy test. | Yes. |
| §63.10(b)(2)(xiv) | Records | All documentation supporting Initial Notification and Notification of Compliance Status. | Yes. |
| §63.10(c)(1)–(6), (9)–(15) | Records | Applicability determinations | No: §63.8694 specifies the CMS recordkeeping requirements. |
| §63.10(c)(7)–(10) | Records | Records of excess emissions and parameter monitoring exceedances for CMS. | No: §63.8694 specifies the CMS recordkeeping requirements. |
| §63.10(d)(1) | General Reporting Requirements | Requirement to report | Yes. |
| §63.10(d)(2) | Report of Performance Test Results | When to submit to Federal or State authority. | Yes. |
| §63.10(d)(3) | Reporting Opacity or VE Observations | What to report and when | Yes. |
| §63.10(d)(4) | Progress Reports | Must submit progress reports on schedule if under compliance extension. | Yes. |
| §63.10(d)(5) | Startup, Shutdown, and Malfunction Reports | Contents and submission | Yes. |
| §63.10(e)(1), (2) | Additional CMS Reports | 1. Must report results for each CEM on a unit.
2. Written copy of performance evaluation. | Yes. |
| §63.10(e)(3) | Reports | Excess emission reports | No: §63.8693 specifies the reporting requirements. |
| §63.10(e)(3)(i)–(iii) | Reports | Schedule for reporting excess emissions and parameter monitor exceedances (now defined as deviations). | No: §63.8693 specifies the reporting requirements. |
Citation | Subject | Brief description | Applies to subpart
--- | --- | --- | ---
§63.10(e)(3)(iv)–(v) | Excess Emissions Reports | 1. Requirement to revert to the frequency specified in the relevant standard if there is an excess emissions and parameter monitor exceedances (now defined as deviations). 2. Provision to request semiannual reporting after compliance for one year. 3. Submit report by 30th day following end of quarter or calendar half. 4. If there has not been an exceedance or excess emission (now defined as deviations), report content is a statement that there have been no deviations. | No; §63.8693 specifies the reporting requirements.
§63.10(e)(3)(iv)–(v) | Excess Emissions Reports | Must submit report containing all of the information in §63.10(c)(5)(13), §63.8(c)(7)–(8). | No; §63.8693 specifies the reporting requirements.
§63.10(e)(3)(vi)–(viii) | Excess Emissions Report and Summary Report | 1. Requirements for reporting excess emissions for CMS (now called deviations). 2. Requires all of the information in §63.10(c)(5)(13), §63.8(c)(7)–(8). | No; §63.8693 specifies the reporting requirements.
§63.10(e)(4) | Reporting COMS data | Must submit COMS data with performance test data. | Yes, if COMS used.
§63.10(f) | Waiver for Recordkeeping/Reporting | Procedures for Administrator to waive requirements for flares | Yes.
§63.11 | Flares | Requirements for flares | Yes.
§63.12 | Delegation | State authority to enforce standards | Yes.
§63.13 | Addresses | Addresses where reports, notifications, and requests are sent. | Yes.
§63.14 | Incorporation by Reference | Test methods incorporated by reference. | Yes.
§63.15 | Availability of Information | Public and confidential information | Yes.


Subpart MMMMM—National Emission Standards for Hazardous Air Pollutants: Flexible Polyurethane Foam Fabrication Operations

SOURCE: 68 FR 18070, Apr. 14, 2003, unless otherwise noted.

WHAT THIS SUBPART COVERS

§63.8780 What is the purpose of this subpart?

This subpart establishes national emission standards for hazardous air pollutants (NESHAP) emitted from flexible polyurethane foam fabrication operations. This subpart also establishes requirements to demonstrate initial and continuous compliance with the emission standards.

§63.8782 Am I subject to this subpart?

(a) You are subject to this subpart if you own or operate a flexible polyurethane foam fabrication plant site that operates a flame lamination affected source, as defined at §63.8784(b)(2), and that is located at, or is part of a major emission source of hazardous air pollutants (HAP) or that operates a loop slitter affected source, as defined at §63.8784(b)(1), that meets the criteria in paragraphs (a)(1) and (2) of this section.

(1) The loop slitter affected source uses one or more HAP-based adhesives at any time on or after April 14, 2003.

(2) The loop slitter affected source is located at or is part of a major source of HAP.

(b) A flexible polyurethane foam fabrication plant site is a plant site where pieces of flexible polyurethane foam are bonded together or to other substrates using HAP-based adhesives or flame lamination.

(c) A major source of HAP is a plant site that emits or has the potential to
§ 63.8784 What parts of my plant does this subpart cover?

(a) This subpart applies to each existing, new, or reconstructed affected source at facilities engaged in flexible polyurethane foam fabrication.

(b) The affected sources are defined in this section in paragraphs (b)(1) and (2) of this section.

(1) The loop slitter adhesive use affected source is the collection of all loop slitters and associated adhesive application equipment used to apply HAP-based adhesives to bond foam to foam at a flexible polyurethane foam fabrication plant site.

(2) The flame lamination affected source is the collection of all flame lamination lines associated with the flame lamination of foam to any substrate at a flexible polyurethane foam fabrication plant site.

(c)(1) A new affected source is one that commences construction after August 8, 2001 and meets the applicability criteria of §63.8782 at the time construction commences.

(2) If you add one or more flame lamination lines at a plant site where flame lamination lines already exist, the added line(s) shall be a new affected source and meet new source requirements if the added line(s) has the potential to emit 10 tons per year or more of any HAP or 25 tons or more per year of any combination of HAP.

(d) A reconstructed affected source is one that commences reconstruction after August 8, 2001 and meets the criteria for reconstruction as defined in §63.2.

(e) For each new or reconstructed flame lamination affected source, you must develop a written startup, shutdown, and malfunction plan according to the provisions in §63.6(e)(3).


§ 63.8786 When do I have to comply with this subpart?

(a) If you have a new or reconstructed affected source, you must comply with this subpart according to paragraphs (a)(1) and (2) of this section.

(1) If you start up your new or reconstructed affected source before April 14, 2003, then you must comply with the emission standards for new or reconstructed sources in this subpart no later than April 14, 2003.

(2) If you start up your new or reconstructed affected source on or after April 14, 2003, then you must comply with the emission standards for new or reconstructed sources in this subpart upon startup of your affected source.

(b) If you have an existing loop slitter affected source, you must comply with the emission standards for existing sources no later than 1 year after April 14, 2003.

(c) If you have an area source that increases its emissions or its potential to emit such that it becomes a major source of HAP and an affected source subject to this subpart, the provisions in paragraphs (c)(1) and (2) of this section apply.

(1) A new affected source as specified at §63.8784(c) or a reconstructed affected source as specified at §63.8784(d) must be in compliance with this subpart upon startup.

(2) An existing affected source as specified at §63.8784(e) must be in compliance with this subpart no later than 1 year after the date on which the area source became a major source.

(d) You must meet the notification requirements in §63.8816 according to the schedule in §63.8816 and in subpart A of this part. Some of the notifications must be submitted before you are required to comply with the emission standards in this subpart.

(e) If you have a loop slitter affected source, you must have data on hand beginning on the compliance date specified in paragraph (b) of this section as necessary to demonstrate that your adhesives are not HAP-based. The types
of data necessary are described in §§63.8802 and 63.8810.

Emission Limitations

§ 63.8790 What emission limitations must I meet?

(a) You must meet each emission limit in Table 1 to this subpart that applies to you.

(b) You must meet each operating limit in Table 2 to this subpart that applies to you.

General Compliance Requirements

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

(a) For each loop slitter adhesive use affected source, you must be in compliance with the requirements in this subpart at all times.

(b) For each new or reconstructed flame lamination affected source, you must be in compliance with the requirements in this subpart at all times, except during periods of startup, shutdown, and malfunction.

(c) You must always operate and maintain your affected source, including air pollution control and monitoring equipment, according to the provisions in §63.6(e)(1)(i).

(d) During the period between the compliance date specified for your new or reconstructed flame lamination affected source in §63.8786, and the date upon which continuous compliance monitoring systems have been installed and verified and any applicable operating limits have been set, you must maintain a log detailing the operation and maintenance of the process and emissions control equipment.

(e) For each new or reconstructed flame lamination affected source, you must develop a written startup, shutdown, and malfunction plan according to the provisions in §63.6(e)(3).

(f) For each monitoring system required in this section for new or reconstructed flame lamination sources, you must develop and submit for approval a site-specific monitoring plan that addresses the requirements in paragraphs (f)(1) through (3) of this section.

(1) Installation of the continuous monitoring system (CMS) sampling probe or other interface at a measurement location relative to each affected process unit such that the measurement is representative of control of the exhaust emissions (e.g., on or downstream of the last control device);

(2) Performance and equipment specifications for the sample interface, the pollutant concentration or parametric signal analyzer, and the data collection and reduction system; and

(3) Performance evaluation procedures and acceptance criteria (e.g., calibrations).

(g) In your site-specific monitoring plan, you must also address the ongoing procedures specified in paragraphs (g)(1) through (3) of this section.

(1) Ongoing operation and maintenance procedures in accordance with the general requirements of §§63.8(c)(1), (3), (4)(ii), (7), and (8), and 63.8804;

(2) Ongoing data quality assurance procedures in accordance with the general requirements of §63.8(d); and

(3) Ongoing recordkeeping and reporting procedures in accordance with the general requirements of §63.10(c), (e)(1), and (e)(2)(i).


Testing and Initial Compliance Requirements

§ 63.8798 By what date must I conduct performance tests or other initial compliance demonstrations?

(a) For each loop slitter affected source, you must conduct the initial compliance demonstration by the compliance date that is specified for your source in §63.8786.

(b) For each new or reconstructed flame lamination affected source, you must conduct performance tests within 180 calendar days after the compliance date that is specified for your source in §63.8786 and according to the provisions in §63.7(a)(2).

§ 63.8800 What performance tests and other procedures must I use to demonstrate compliance with the emission limit for flame lamination?

(a) You must conduct each performance test in Table 3 to this subpart that applies to you.
(b) Each performance test must be conducted according to the requirements in §63.7(e)(1) and under the specific conditions in Table 3 to this subpart.

(c) You may not conduct performance tests during periods of startup, shutdown, or malfunction, as specified in §63.7(e)(1).

(d) You must conduct at least 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) You must determine the percent reduction of HAP emissions during the performance test according to paragraphs (e)(1) through (3) of this section.

(1) If you use chlorinated fire retardant foams, determine the percent reduction of HCl to represent HAP emissions from the source. If you do not use chlorinated fire retardant foams, determine the percent reduction of HCN to represent HAP emissions from the source.

(2) Calculate the concentration of HAP at the control device inlet and at the control device outlet using the procedures in the specified test method.

(3) Compare the calculated HAP concentration at the control device inlet to the calculated HAP concentration at the control device outlet to determine the percent reduction over the period of the performance test, using Equation 1 of this section:

\[ R = \frac{\sum_{i=1}^{n} E_{\text{inlet},i} - \sum_{i=1}^{n} E_{\text{outlet},i}}{\sum_{i=1}^{n} E_{\text{inlet},i}} \times 100 \]  

[Eq. 1]

Where:

- \( R \) = Efficiency of control device, percent.
- \( E_{\text{inlet},i} \) = HAP concentration of control device inlet stream for test run \( i \), mg/dscm.
- \( E_{\text{outlet},i} \) = HAP concentration of control device outlet stream for test run \( i \), mg/dscm.
- \( n \) = Number of runs conducted for the performance test.

(f) You must also meet the requirements in paragraphs (f)(1) and (2) of this section.

(1) Conduct the performance tests using foams that are representative of foams typically used at your flame lamination affected source. If you use foams containing chlorinated fire retardants, you must conduct the performance tests using these foams.

(2) Establish all applicable operating limits that correspond to the control system efficiency as described in Table 3 to this subpart.

§63.8802 What methods must I use to demonstrate compliance with the emission limitation for loop slitter adhesive use?

(a) Determine the HAP content for each material used. To determine the HAP content for each material used in your foam fabrication operations, you must use one of the options in paragraphs (a)(1) through (3) of this section. You must use the option in paragraph (a)(3) of this section, you are subject to the provisions of paragraph (a)(4) of this section.

(1) Method 311 (appendix A to 40 CFR part 63). You may use Method 311 for determining the mass fraction of HAP. Use the procedures specified in paragraphs (a)(1)(i) and (ii) of this section when determining HAP content by Method 311.

(i) Include in the HAP total each HAP that is measured to be present at 0.1 percent by mass or more for Occupational Safety and Health Administration (OSHA)-defined carcinogens as specified in 29 CFR 1910.1200(d)(4) and at 1.0 percent by mass or more for other compounds. For example, if toluene (not an OSHA carcinogen) is measured to be 0.5 percent of the material by mass, you do not need to include it in the HAP total. Express the mass fraction of each HAP you measure as a value truncated to four places after the decimal point (for example, 0.1234).

(ii) Calculate the total HAP content in the test material by adding up the individual HAP contents and truncating the result to three places after the decimal point (for example, 0.123).

(2) Alternative method. You may use an alternative test method for determining mass fraction of HAP if you obtain prior approval by the Administrator. You must follow the procedure in §63.7(f) to submit an alternative test method for approval.

(3) Information from the supplier or manufacturer of the material. You may
rely on information other than that generated by the test methods specified in paragraphs (a)(1) and (2) of this section to determine the mass fraction of HAP according to paragraphs (a)(3)(i) and (ii) of this section. This information may include, but is not limited to, a material safety data sheet (MSDS), a certified product data sheet (CPDS), or a manufacturer’s hazardous air pollutant data sheet.

(i) Include in the HAP total each HAP that is present at 0.1 percent by mass or more for OSHA-defined carcinogens as specified in 29 CFR 1910.1200(d)(4) and at 1.0 percent by mass or more for other compounds. For example, if toluene (not an OSHA carcinogen) is 0.5 percent of the material by mass, you do not have to include it in the HAP total.

(ii) If the HAP content is provided by the material supplier or manufacturer as a range, then you must use the upper limit of the range for determining compliance.

4 Verification of supplier or manufacturer information. Although you are not required to perform testing to verify the information obtained according to paragraph (a)(3) of this section, the Administrator may require a separate measurement of the total HAP content using the methods specified in paragraph (a)(1) or (2) of this section. If this measurement exceeds the total HAP content provided by the material supplier or manufacturer, then you must use the measured HAP content to determine compliance.

(b) [Reserved]

§ 63.8806 How do I demonstrate initial compliance with the emission limitations?

(a) You must demonstrate initial compliance with each emission limit that applies to you according to Table 4 to this subpart.

(b) You must establish each site-specific operating limit in Table 2 to this subpart that applies to you according to the requirements in §63.8800 and Table 3 to this subpart.

(c) You must submit the Notification of Compliance Status containing the results of the initial compliance demonstration according to the requirements in §63.8816(e) through (h).

CONTINUOUS COMPLIANCE REQUIREMENTS

§ 63.8810 How do I monitor and collect data to demonstrate continuous compliance?

(a) If you own or operate a loop slitter adhesive use affected source, you must meet the requirements in paragraphs (a)(1) and (2) of this section.

(1) Maintain a list of each adhesive and the manufacturer or supplier of each.

(b) Maintain a record of EPA Method 311 (appendix A to 40 CFR part 63), approved alternative method, or other reasonable means of HAP content determinations indicating the mass percent of each HAP for each adhesive.

(b) If you own or operate a new or reconstructed flame lamination affected source, you must meet the requirements in paragraphs (b)(1) through (3) of this section if you use a scrubber, or paragraph (b)(4) of this section if you use any other control device.

(1) Keep records of the daily average scrubber inlet liquid flow rate.

(2) Keep records of the daily average scrubber effluent pH.

(3) If you use a venturi scrubber, keep records of daily average pressure drop across the venturi.

(4) Keep records of operating parameter values for each operating parameter that applies to you.

(c) If you own or operate a new or reconstructed flame lamination affected source, you must meet the requirements in paragraphs (c)(1) through (4) of this section.

(1) Except for periods of monitoring 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 (or collect data at all required intervals) at all times that the affected source is operating. This includes periods of startup, shutdown, and malfunction when the affected source is operating. A monitoring malfunction includes, but is not limited to, any sudden, infrequent, not reasonably preventable failure of the monitoring device to provide valid data. Monitoring failures that are caused by poor maintenance or careless operation are not malfunctions.
§ 63.8812 How do I demonstrate continuous compliance with the emission limitations?

(a) You must demonstrate continuous compliance with each emission limit and operating limit in Tables 1 and 2 to this subpart that applies to you according to the methods specified in Table 5 to this subpart.

(b) You must report each instance in which you did not meet each emission limit and each operating limit in Tables 1 and 2 to this subpart that apply to you. For new or reconstructed flame lamination affected sources, this includes periods of startup, shutdown, and malfunction. These instances are deviations from the operating limits in this subpart. These deviations must be reported according to the requirements in §63.8818.

(c) [Reserved]

(d) Consistent with §§63.8(e) and 63.7(e)(1), deviations that occur at a new or reconstructed flame lamination affected source during a period of startup, shutdown, or malfunction are not violations if you demonstrate to the Administrator’s satisfaction that you were operating in accordance with §63.6(e)(1). The Administrator will determine whether deviations that occur at a new or reconstructed flame lamination affected source during a period of startup, shutdown, or malfunction are violations, according to the provisions in §63.6(e).

(e) You also must meet the following requirements if you are complying with the adhesive use ban for loop slitter adhesive use described in §63.8790(a).

(1) If, after you submit the Notification of Compliance Status, you use an adhesive for which you have not previously verified percent HAP mass using the methods in §63.8802, you must verify that each adhesive used in the affected source meets the emission limit, using any of the methods in §63.8802.

(2) You must update the list of all the adhesives used at the affected source.

(3) With the compliance report for the reporting period during which you used the new adhesive, you must submit the updated list of all adhesives and a statement certifying that, as purchased, each adhesive used at the affected source during the reporting period met the emission limit in Table 1 to this subpart.

§ 63.8816 What notifications must I submit and when?

(a) You must submit all of the notifications in §§63.7(b) and (c), 63.8(f), and 63.9(b) through (h) that apply to you.

(b) If you own or operate an existing loop slitter or flame lamination affected source, submit an initial notification no later than 120 days after April 14, 2003.

(c) If you own or operate a new or reconstructed loop slitter or flame lamination affected source, submit an initial notification no later than 60 calendar days after the performance test is scheduled to begin, as required in §63.7(b)(1).

(d) If you own or operate a new or reconstructed flame lamination affected source, submit a notification of intent to conduct a performance test at least 60 calendar days before the performance test is scheduled to begin, as required in §63.7(b)(1).

(e) If you own or operate a loop slitter affected source, submit a Notification of Compliance Status according to §63.9(b)(2)(ii) within 60 days of the compliance date specified in §63.8780.
Environmental Protection Agency

§ 63.8818

(f) If you own or operate a new or reconstructed flame lamination affected source, submit a Notification of Compliance Status according to § 63.9(h)(2)(i) that includes the results of the performance test conducted according to the requirements in Table 3 to this subpart. You must submit the notification before the close of business on the 60th calendar day following the completion of the performance test according to § 63.10(d)(2).

(g) For each new or reconstructed flame lamination affected source, the Notification of Compliance Status must also include the information in paragraphs (g)(1) and (2) that applies to you.

(1) The operating parameter value averaged over the full period of the performance test (for example, average pH).

(2) The operating parameter range within which HAP emissions are reduced to the level corresponding to meeting the applicable emission limits in Table 1 to this subpart.

(h) For each loop slitter adhesive use affected source, the Notification of Compliance Status must also include the information listed in paragraphs (h)(1) and (2) of this section.

(1) A list of each adhesive used at the affected source, its HAP content (percent by mass), and the manufacturer or supplier of each.

(2) A statement certifying that each adhesive that was used at the affected source during the reporting period met the emission limit in Table 1 to this subpart.

§ 63.8818 What reports must I submit and when?

(a) You must submit each report in Table 6 to 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 compliance report for new or reconstructed flame lamination affected sources semiannually according to paragraphs (b)(1) through (4) of this section.

(1) The first compliance report must cover the period beginning on the compliance date that is specified for your affected source in § 63.8786 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 § 63.8786.

(2) 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 § 63.8786.

(3) 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) Each subsequent compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date follows the end of the semiannual reporting period.

(c) For each loop slitter adhesive use affected source, you may submit annual compliance reports in place of semiannual reports.

(d) For each affected source that is subject to permitting regulations pursuant to 40 CFR part 70 or 40 CFR part 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 (4) of this section.

(e) The compliance report must contain the information in paragraphs (e)(1) through (5) of this section.

(1) Company name and address.

(2) Statement by a responsible official with that official’s name, title, and signature, certifying the truth, accuracy and completeness of the content of the report.

(3) Date of report and beginning and ending dates of the reporting period.

(4) If there are no deviations from any emission limitations (emission limit or operating limit) that applies to you, a statement that there were no deviations from the emission limitations during the reporting period.
§ 63.8820 What records must I keep?

(a) You must keep a copy of each notification and report that you submit to comply with this subpart, including the emission limit in Table 1 to this subpart.

(h) Each affected source that has obtained a title V operating permit pursuant to 40 CFR part 70 or 40 CFR part 71 must report all deviations as defined in this subpart in the semiannual monitoring report required by 40 CFR 70.6(a)(3)(ii)(A) or 40 CFR 71.6(a)(3)(ii)(A). If an affected source submits a compliance report pursuant to Table 6 to this subpart along with, or as part of, the semiannual monitoring report required by 40 CFR 70.6(a)(3)(ii)(A) or 40 CFR 71.6(a)(3)(ii)(A), and the compliance report includes all required information concerning deviations from any emission limitation (including any operating limit) 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.

(i) For each startup, shutdown, or malfunction during the reporting period where the source does not meet the emission limitations set out in § 63.8790 that occurs at a new or reconstructed flame lamination affected source and that is not consistent with your startup, shutdown, and malfunction plan, you must submit an immediate startup, shutdown, and malfunction report.

(1) An initial report containing a description of the actions taken for the event must be submitted by fax or telephone within 2 working days after starting actions inconsistent with the plan.

(2) A followup report containing the information listed in § 63.10(d)(5)(ii) must be submitted within 7 working days after the end of the event unless you have made alternative reporting arrangements with the permitting authority.

§ 63.8820 What records must I keep?
all documentation supporting any Initial Notification or Notification of Compliance Status that you submitted, according to the requirements in §63.10(b)(2)(xiv).

(b) For each new or reconstructed flame lamination affected source, you must also keep the following records specified in paragraphs (b)(1) through (4) of this section.

1. The records in §63.6(e)(3)(iii) through (v) related to startup, shutdown, and malfunction.
2. Records of performance tests, as required in §63.10(b)(2)(viii).
3. Records of operating parameter values.
4. Records of the date and time that each deviation started and stopped and whether the deviation occurred during a period of startup, shutdown, or malfunction or during another period.

(c) For each loop slitter adhesive use affected source, you must keep the following records specified in paragraphs (c)(1) and (2) of this section.

1. A list of each adhesive and the manufacturer or supplier of each.
2. A record of EPA Method 311 (appendix A to 40 CFR part 63), approved alternative method, or other reasonable means of determining the mass percent of total HAP for each adhesive used at the affected source.

§ 63.8822 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 on site for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to §63.10(b)(1). You can keep the records offsite for the remaining 3 years.

§ 63.8826 What parts of the General Provisions apply to me?

Table 7 to this subpart shows which sections of the General Provisions in §§63.1 through 63.15 apply to you.

§ 63.8828 Who implements and enforces this subpart?

(a) This subpart can be implemented and enforced by us, the U.S. Environmental Protection Agency (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, in addition to 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 if implementation and enforcement of 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 U.S. EPA and are not transferred to the State, local, or tribal agency.

(c) The authorities in paragraphs (c)(1) through (4) that cannot be delegated to State, local, or tribal agencies are as follows:

1. Approval of alternatives to requirements in §§63.8780, 63.8782, 63.8784, 63.8786, and 63.8790.

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.

§ 63.8830 What definitions apply to this subpart?

Terms used in this subpart are defined in the CAA, in 40 CFR 63.2, and in this section as follows:

Adhesive means any chemical substance that is applied for the purpose
of bonding foam to foam, foam to fabric, or foam to any other substrate, other than by mechanical means. Products used on humans and animals, adhesive tape, contact paper, or any other product with an adhesive incorporated onto it in an inert substrate shall not be considered adhesives under this subpart.

**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 (including any operating limit); or
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 (including any operating limit) in this subpart during startup, shutdown, or malfunction, regardless of whether or not such failure is permitted by this subpart.

**Emission limitation** means any emission limit or operating limit.

**Flame lamination** means the process of bonding flexible foam to one or more layers of material by heating the foam surface with an open flame.

**Flame lamination line** means the flame laminator and associated rollers.

**HAP-based adhesive** means an adhesive containing 5 percent (by weight) or more of HAP, according to EPA Method 311 (appendix A to 40 CFR part 63) or another approved alternative.

**Loop slitter** means a machine used to create thin sheets of foam from the large blocks of foam or “buns” created at a slabstock flexible polyurethane foam production plant.

**Research and development process** means a laboratory or pilot plant operation whose primary purpose is to conduct research and development into new processes and products where the operations are under the close supervision of technically trained personnel, and which is not engaged in the manufacture of products for commercial sale, except in a de minimis manner.

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

### TABLE 1 TO SUBPART MMMMM OF PART 63—EMISSION LIMITS

As stated in §63.8790(a), you must comply with the emission limits in the following table:

<table>
<thead>
<tr>
<th>For . . .</th>
<th>You must . . .</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Each existing, new, or reconstructed loop slitter adhesive use affected source.</td>
<td>Not use any HAP-based adhesives.</td>
</tr>
<tr>
<td>2. Each new or reconstructed flame lamination affected source</td>
<td>Reduce HAP emissions by 90 percent.</td>
</tr>
<tr>
<td>3. Each existing flame lamination affected sources</td>
<td>There are no emission limits for existing flame lamination sources. However, you must submit an initial notification per §63.8816(b).</td>
</tr>
</tbody>
</table>

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

As stated in §63.8790(b), you must comply with the operating limits in the following table:

<table>
<thead>
<tr>
<th>For each . . .</th>
<th>You must . . .</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Scrubber</td>
<td>a. Maintain the daily average scrubber inlet liquid flow rate above the minimum value established during the performance test.</td>
</tr>
<tr>
<td>2. Other type of control device to which flame lamination emissions are ducted.</td>
<td>b. Maintain the daily average scrubber effluent pH within the operating range value established during the performance test.</td>
</tr>
<tr>
<td></td>
<td>c. If you use a venturi scrubber, maintain the daily average pressure drop across the venturi within the operating range value established during the performance test.</td>
</tr>
<tr>
<td></td>
<td>Maintain your operating parameter(s) within the ranges established during the performance test and according to your monitoring plan.</td>
</tr>
</tbody>
</table>
TABLE 3 TO SUBPART MMMMMM OF PART 63—PERFORMANCE TEST REQUIREMENTS FOR NEW OR RECONSTRUCTED FLAME LAMINATION AFFECTED SOURCES

As stated in §63.8800, you must comply with the requirements for performance tests for new or reconstructed flame lamination affected sources in the following table using the requirements in rows 1 through 5 of the table if you are measuring HCl and using a scrubber, row 6 if you are measuring HCN and using a scrubber, and row 7 if you are using any other control device.

<table>
<thead>
<tr>
<th>For each new or reconstructed flame lamination affected source, you must . . .</th>
<th>Using . . .</th>
<th>According to the following requirements . . .</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Select sampling port's location and the number of traverse ports.</td>
<td>Method 1 or 1A in appendix A to part 60 of this chapter.</td>
<td>Sampling sites must be located at the inlet and outlet of the scrubber and prior to any releases to the atmosphere.</td>
</tr>
<tr>
<td>2. Determine velocity</td>
<td>Method 2, 2A, 2C, 2D, 2F, or 2G in appendix A to part 60 of this chapter.</td>
<td>Assume a molecular weight of 29 (after moisture correction) for calculation purposes.</td>
</tr>
<tr>
<td>3. Determine gas molecular weight.</td>
<td>Method 4 in appendix A to part 60 of this chapter.</td>
<td>i. Measure total HCl emissions and determine the reduction efficiency of the control device using Method 26A.</td>
</tr>
<tr>
<td>4. Measure moisture content of the stack gas.</td>
<td>a. Method 26A in appendix A to part 60 of this chapter.</td>
<td>ii. Collect scrubber liquid flow rate, scrubber effluent pH, and pressure drop (pressure drop data only required for venturi scrubbers) every 15 minutes during the entire duration of each 1-hour test run, and determine the average scrubber liquid flow rate, scrubber effluent pH, and pressure drop (pressure drop data only required for Venturi scrubbers) over the period of the performance test by computing the average of all of the 15-minute readings.</td>
</tr>
<tr>
<td>5. Measure HCl concentration if you use chlorinated fire retardants in the laminated foam.</td>
<td>a. A method approved by the Administrator.</td>
<td>i. Conduct the performance test according to the site-specific test plan submitted according to §63.7(c)(2)(i). Measure total HCN emissions and determine the reduction efficiency of the control device. Any performance test which measures HCN concentrations must be submitted for the administrator's approval prior to testing. You must use EPA Method 301 (40 CFR part 63, Appendix A) to validate your method.</td>
</tr>
<tr>
<td>6. Measure HCN concentration if you do not use chlorinated fire retardants in the laminated foam.</td>
<td>a. EPA-approved methods and data from the continuous parameter monitoring system.</td>
<td>ii. Collect operating parameter data as specified in the site-specific test plan.</td>
</tr>
<tr>
<td>7. Determine control device efficiency and establish operating parameter limits with which you will demonstrate continuous compliance with the emission limit that applies to the source if you use any control device other than a scrubber.</td>
<td>a.</td>
<td>i. Conduct the performance test according to the site-specific test plan submitted according to §63.7(c)(2)(i).</td>
</tr>
</tbody>
</table>

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

As stated in §63.8806, you must comply with the requirements to demonstrate initial compliance with the applicable emission limits in the following table:

<table>
<thead>
<tr>
<th>For . . .</th>
<th>For the following emission limit . . .</th>
<th>You have demonstrated initial compliance if . . .</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. Each new or reconstructed flame lamination affected source using a scrubber.</td>
<td>Reduce HAP emissions by 90 percent . . .</td>
<td>The average HAP emissions, measured over the period of the performance test(s), are reduced by 90 percent.</td>
</tr>
</tbody>
</table>
**Table 5** to Subpart MMMMM of Part 63—Continuous Compliance With Emission Limits and Operating Limits

As stated in § 63.8812(a), you must comply with the requirements to demonstrate continuous compliance with the applicable emission limits or operating limits in the following table:

<table>
<thead>
<tr>
<th>For . . .</th>
<th>For the following emission limit . . .</th>
<th>You have demonstrated initial compliance if . . .</th>
</tr>
</thead>
<tbody>
<tr>
<td>3. Each new or reconstructed flame lamination affected source using any other control device emissions by.</td>
<td>Reduce HAP emissions by 90 percent . . .</td>
<td>The average HAP emissions, measured over the period of the performance test(s), are reduced by 90 percent.</td>
</tr>
</tbody>
</table>

**Table 6** to Subpart MMMMM of Part 63—Requirements for Reports

As stated in § 63.8818(a), you must submit a compliance report that includes the information in § 63.8818(e) through (g) as well as the information in the following table. Rows 1 and 3 of the following table apply to loop slitter affected sources. Rows 1 through 5 apply to flame lamination affected sources. You must also submit startup, shutdown, and malfunction reports according to the requirements in the following table if you own or operate a new or reconstructed flame lamination affected source.

<table>
<thead>
<tr>
<th>If . . .</th>
<th>Then you must submit a report or statement that . . .</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. There are no deviations from any emission limitations that apply to you.</td>
<td>There were no deviations from the emission limitations during the reporting period.</td>
</tr>
<tr>
<td>2. There were no periods during which the operating parameter monitoring systems were out-of-control in accordance with the monitoring plan.</td>
<td>There were no periods during which the CPMS were out-of-control during the reporting period.</td>
</tr>
<tr>
<td>3. There was a deviation from any emission limitation during the reporting period.</td>
<td>Contains the information in § 63.8818(e)(5).</td>
</tr>
<tr>
<td>4. There were periods during which the operating parameter monitoring systems were out-of-control in information in accordance with the monitoring plan.</td>
<td>Contains the information in § 63.8818(f)(3).</td>
</tr>
</tbody>
</table>
If . . . Then you must submit a report or statement that . . .

Contains the information in §63.8818(i).

## Table 7 to Subpart MMMMM of Part 63—Applicability of General Provisions to Subpart MMMMM

As stated in §63.8826, you must comply with the applicable General Provisions requirements according to the following table:

<table>
<thead>
<tr>
<th>Citation</th>
<th>Requirement</th>
<th>Applies to subpart MMMMM</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>§63.1</td>
<td>Initial applicability determination; applicability after standard established; permit requirements; extensions; notifications.</td>
<td>Yes.</td>
<td></td>
</tr>
<tr>
<td>§63.2</td>
<td>Definitions</td>
<td>Yes</td>
<td>Additional definitions are found in §63.8830.</td>
</tr>
<tr>
<td>§63.3</td>
<td>Units and abbreviations</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>§63.4</td>
<td>Prohibited activities; compliance date; circumvention, severability.</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>§63.5</td>
<td>Construction/reconstruction applicability; applications; approvals.</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>§63.6(a)</td>
<td>Compliance with standards and maintenance requirements-applicability.</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>§63.6(b)(1)–(4)</td>
<td>Compliance dates for new or reconstructed sources.</td>
<td>Yes</td>
<td>§63.8786 specifies compliance dates.</td>
</tr>
<tr>
<td>§63.6(b)(5)</td>
<td>Notification if commenced construction or reconstruction after proposal.</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>§63.6(b)(6)</td>
<td>[Reserved]</td>
<td>Yes</td>
<td>§63.8786 specifies compliance dates.</td>
</tr>
<tr>
<td>§63.6(b)(7)</td>
<td>Compliance dates for new or reconstructed area sources that become major.</td>
<td>Yes</td>
<td>§63.8786 specifies compliance dates.</td>
</tr>
<tr>
<td>§63.6(c)(1)–(2)</td>
<td>Compliance dates for existing sources.</td>
<td>Yes</td>
<td>§63.8786 specifies compliance dates.</td>
</tr>
<tr>
<td>§63.6(c)(3)–(4)</td>
<td>[Reserved]</td>
<td>Yes</td>
<td>§63.8786 specifies compliance dates.</td>
</tr>
<tr>
<td>§63.6(c)(5)</td>
<td>Compliance dates for existing area sources that become major.</td>
<td>Yes</td>
<td>§63.8786 specifies compliance dates.</td>
</tr>
<tr>
<td>§63.6(d)</td>
<td>[Reserved]</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>§63.6(e)(1)</td>
<td>Operation and maintenance requirements.</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>§63.6(e)(2)</td>
<td>Startup, shutdown, and malfunction plans.</td>
<td>Yes</td>
<td>Only applies to new or reconstructed flame lamination affected sources.</td>
</tr>
<tr>
<td>§63.6(i)(1)</td>
<td>Compliance except during SSM</td>
<td>Yes</td>
<td>Only applies to new or reconstructed flame lamination affected sources.</td>
</tr>
<tr>
<td>§63.6(i)(2)–(3)</td>
<td>Methods for determining compliance.</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>§63.6(g)</td>
<td>Use of an alternative nonopacity emission standard.</td>
<td>Yes</td>
<td>Subpart MMMMM does not specify opacity or visible emission standards.</td>
</tr>
<tr>
<td>§63.6(h)</td>
<td>Compliance with opacity/visible emission standards.</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>§63.6(i)</td>
<td>Extension of compliance with emission standards.</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>§63.6(j)</td>
<td>Presidential compliance exemption.</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>§63.7(a)(1)–(2)</td>
<td>Performance test dates</td>
<td>Yes</td>
<td>Except for loop slitter affected sources as specified in §63.8798(a).</td>
</tr>
<tr>
<td>Citation</td>
<td>Requirement</td>
<td>Applies to subpart MMMMM</td>
<td>Explanation</td>
</tr>
<tr>
<td>--------------------------</td>
<td>------------------------------------------------------------------------------</td>
<td>--------------------------</td>
<td>-------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>§63.7(a)(3)</td>
<td>Administrator’s section 114 authority to require a performance test.</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>§63.7(b)</td>
<td>Notification of performance test and rescheduling.</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>§63.7(c)</td>
<td>Quality assurance program and site-specific test plans.</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>§63.7(d)</td>
<td>Performance testing facilities</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>§63.7(e)(1)</td>
<td>Conditions for conducting performance tests.</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>§63.7(f)</td>
<td>Use of an alternative test method.</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>§63.7(g)</td>
<td>Performance test data analysis, recordkeeping, and reporting.</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>§63.7(h)</td>
<td>Waiver of performance tests</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>§63.8(a)(1)–(2)</td>
<td>Applicability of monitoring requirements.</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>§63.8(a)(3)</td>
<td>[Reserved]</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>§63.8(a)(4)</td>
<td>Monitoring with flares</td>
<td>No</td>
<td>Subpart MMMMM does not refer directly or indirectly to §63.11.</td>
</tr>
<tr>
<td>§63.8(b)</td>
<td>Conduct of monitoring and procedures when there are multiple effluents and multiple monitoring systems.</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>§63.8(c)(1)–(3)</td>
<td>Continuous monitoring system (CMS) operation and maintenance.</td>
<td>Yes</td>
<td>Applies as modified by §63.8794(f) and (g).</td>
</tr>
<tr>
<td>§63.8(c)(4)</td>
<td>Continuous monitoring system requirements during breakdown, out-of-control, repair, maintenance, and high-level calibration drifts.</td>
<td>Yes</td>
<td>Applies as modified by §63.8794(g).</td>
</tr>
<tr>
<td>§63.8(c)(5)</td>
<td>Continuous opacity monitoring system (COMS) minimum procedures.</td>
<td>No</td>
<td>Subpart MMMMM does not have opacity or visible emission standards.</td>
</tr>
<tr>
<td>§63.8(c)(6)</td>
<td>Zero and high level calibration checks.</td>
<td>Yes</td>
<td>Applies as modified by §63.8794(f).</td>
</tr>
<tr>
<td>§63.8(c)(7)–(8)</td>
<td>Out-of-control periods, including reporting.</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>§63.8(d)–(e)</td>
<td>Quality control program and CMS performance evaluation.</td>
<td>No</td>
<td>Applies as modified by §63.8794(f) and (g).</td>
</tr>
<tr>
<td>§63.8(f)(1)–(5)</td>
<td>Use of an alternative monitoring method.</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>§63.8(f)(6)</td>
<td>Alternative to relative accuracy test.</td>
<td>No</td>
<td>Only applies to sources that use continuous emissions monitoring systems (CEMS).</td>
</tr>
<tr>
<td>§63.8(g)</td>
<td>Data reduction</td>
<td>Yes</td>
<td>Applies as modified by §63.8794(g).</td>
</tr>
<tr>
<td>§63.9(a)</td>
<td>Notification requirements—applicability.</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>§63.9(b)</td>
<td>Initial notifications</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>§63.9(c)</td>
<td>Request for compliance extension.</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>§63.9(d)</td>
<td>Notification that a new source is subject to special compliance requirements.</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>§63.9(e)</td>
<td>Notification of performance test</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>§63.9(f)</td>
<td>Notification of visible emissions/opacity test.</td>
<td>No</td>
<td>Subpart MMMMM does not have opacity or visible emission standards.</td>
</tr>
<tr>
<td>Citation</td>
<td>Requirement</td>
<td>Applies to subpart MMMMM</td>
<td>Explanation</td>
</tr>
<tr>
<td>----------</td>
<td>-------------</td>
<td>--------------------------</td>
<td>-------------</td>
</tr>
<tr>
<td>§63.9(g)(1)</td>
<td>Additional CMS notifications—date of CMS performance evaluation.</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>§63.9(g)(2)</td>
<td>Use of COMS data</td>
<td>No</td>
<td>Subpart MMMMM does not require the use of COMS.</td>
</tr>
<tr>
<td>§63.9(g)(3)</td>
<td>Alternative to relative accuracy testing</td>
<td>No</td>
<td>Applies only to sources with CEMS.</td>
</tr>
<tr>
<td>§63.9(h)</td>
<td>Notification of compliance status</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>§63.9(i)</td>
<td>Adjustment of submittal deadlines.</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>§63.9(j)</td>
<td>Change in previous information</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>§63.10(a)</td>
<td>Recordkeeping/reporting applicability.</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>§63.10(b)(1)</td>
<td>General recordkeeping requirements.</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>§63.10(b)(2)(i)–(xi)</td>
<td>Records related to startup, shutdown, and malfunction periods and CMS.</td>
<td>Yes</td>
<td>Only applies to new or reconstructed flame lamination affected sources.</td>
</tr>
<tr>
<td>§63.10(b)(2)(xii)</td>
<td>Records when under waiver</td>
<td>No</td>
<td>Applies only to sources with CEMS.</td>
</tr>
<tr>
<td>§63.10(b)(2)(xiii)</td>
<td>Records when using alternative to relative accuracy test.</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>§63.10(b)(2)(xiv)</td>
<td>All documentation supporting initial notification and notification of compliance status.</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>§63.10(b)(3)</td>
<td>Recordkeeping requirements for applicability determinations.</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>§63.10(c)</td>
<td>Additional recordkeeping requirements for sources with CMS.</td>
<td>Yes</td>
<td>Applies as modified by §63.8818.</td>
</tr>
<tr>
<td>§63.10(d)(1)</td>
<td>General reporting requirements</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>§63.10(d)(2)</td>
<td>Performance test results</td>
<td>Yes</td>
<td>Subpart MMMMM does not specify opacity or visible emission standards.</td>
</tr>
<tr>
<td>§63.10(d)(3)</td>
<td>Opacity or visible emissions observations.</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>§63.10(d)(4)</td>
<td>Progress reports for sources with compliance extensions.</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>§63.10(d)(5)</td>
<td>Startup, shutdown, and malfunction reports.</td>
<td>Yes</td>
<td>Only applies to new or reconstructed flame lamination affected sources.</td>
</tr>
<tr>
<td>§63.10(e)(1)</td>
<td>Additional CMS reports—general.</td>
<td>Yes</td>
<td>Applies as modified by §63.8818.</td>
</tr>
<tr>
<td>§63.10(e)(2)(i)</td>
<td>Results of CMS performance evaluations.</td>
<td>Yes</td>
<td>Applies as modified by §63.8794(g).</td>
</tr>
<tr>
<td>§63.10(e)(2)(ii)</td>
<td>Results of continuous opacity monitoring systems performance evaluations.</td>
<td>No</td>
<td>Subpart MMMMM does require the use of COMS.</td>
</tr>
<tr>
<td>§63.10(e)(3)</td>
<td>Excess emissions/CMS performance reports.</td>
<td>Yes</td>
<td>Only applies to new or reconstructed flame lamination affected sources.</td>
</tr>
<tr>
<td>§63.10(e)(4)</td>
<td>Continuous opacity monitoring system data reports.</td>
<td>No</td>
<td>Subpart MMMMM does not require the use of COMS.</td>
</tr>
<tr>
<td>§63.10(f)</td>
<td>Recordkeeping/reporting waiver applicability.</td>
<td>Yes</td>
<td>Facilities subject to subpart MMMMM do not use flares as control devices.</td>
</tr>
<tr>
<td>§63.11</td>
<td>Control device requirements—applicability.</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>§63.12</td>
<td>State authority and delegations</td>
<td>Yes</td>
<td>§63.8828 lists those sections of subparts MMMMM and A that are not delegated.</td>
</tr>
<tr>
<td>§63.13</td>
<td>Addresses</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>§63.14</td>
<td>Incorporation by reference</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>§63.15</td>
<td>Availability of information/confidentiality.</td>
<td>Yes</td>
<td>Subpart MMMMM does not incorporate any material by reference.</td>
</tr>
</tbody>
</table>
FINDING AIDS

A list of CFR titles, subtitles, chapters, subchapters and parts and an alphabetical list of agencies publishing in the CFR are included in the CFR Index and Finding Aids volume to the Code of Federal Regulations which is published separately and revised annually.

Table of CFR Titles and Chapters
Alphabetical List of Agencies Appearing in the CFR
List of CFR Sections Affected
**Table of CFR Titles and Chapters**

*(Revised as of July 1, 2016)*

**Title 1—General Provisions**

<table>
<thead>
<tr>
<th>I</th>
<th>Administrative Committee of the Federal Register (Parts 1–49)</th>
</tr>
</thead>
<tbody>
<tr>
<td>II</td>
<td>Office of the Federal Register (Parts 50–299)</td>
</tr>
<tr>
<td>III</td>
<td>Administrative Conference of the United States (Parts 300–399)</td>
</tr>
<tr>
<td>IV</td>
<td>Miscellaneous Agencies (Parts 400–500)</td>
</tr>
</tbody>
</table>

**Title 2—Grants and Agreements**

**SUBTITLE A—Office of Management and Budget Guidance for Grants and Agreements**

<table>
<thead>
<tr>
<th>I</th>
<th>Office of Management and Budget Governmentwide Guidance for Grants and Agreements (Parts 2–199)</th>
</tr>
</thead>
<tbody>
<tr>
<td>II</td>
<td>Office of Management and Budget Guidance (Parts 200–299)</td>
</tr>
</tbody>
</table>

**SUBTITLE B—Federal Agency Regulations for Grants and Agreements**

| III | Department of Health and Human Services (Parts 300–399)                                       |
| IV  | Department of Agriculture (Parts 400–499)                                                      |
| VI  | Department of State (Parts 600–699)                                                            |
| VII | Agency for International Development (Parts 700–799)                                           |
| VIII| Department of Veterans Affairs (Parts 800–899)                                                  |
| IX  | Department of Energy (Parts 900–999)                                                           |
| X   | Department of the Treasury (Parts 1000–1099)                                                    |
| XI  | Department of Defense (Parts 1100–1199)                                                        |
| XII | Department of Transportation (Parts 1200–1299)                                                   |
| XIII| Department of Commerce (Parts 1300–1399)                                                       |
| XIV | Department of the Interior (Parts 1400–1499)                                                    |
| XV  | Environmental Protection Agency (Parts 1500–1599)                                               |
| XVIII| National Aeronautics and Space Administration (Parts 1800–1899)                               |
| XX  | United States Nuclear Regulatory Commission (Parts 2000–2099)                                  |
| XXII| Corporation for National and Community Service (Parts 2200–2299)                              |
| XXIII| Social Security Administration (Parts 2300–2399)                                               |
| XXIV| Housing and Urban Development (Parts 2400–2499)                                                |
| XXV | National Science Foundation (Parts 2500–2599)                                                   |
| XXVI| National Archives and Records Administration (Parts 2600–2699)                                 |
| XXVII| Small Business Administration (Parts 2700–2799)                                                |
Chap. Title 2—Grants and Agreements—Continued

XXVIII Department of Justice (Parts 2800—2899)
XXIX Department of Labor (Parts 2900—2999)
XXX Department of Homeland Security (Parts 3000—3099)
XXXI Institute of Museum and Library Services (Parts 3100—3199)
XXXII National Endowment for the Arts (Parts 3200—3299)
XXXIII National Endowment for the Humanities (Parts 3300—3399)
XXXIV Department of Education (Parts 3400—3499)
XXXV Export-Import Bank of the United States (Parts 3500—3599)
XXXVI Office of National Drug Control Policy, Executive Office of the President (Parts 3600—3699)
XXXVII Peace Corps (Parts 3700—3799)
LVIII Election Assistance Commission (Parts 5800—5899)
LIX Gulf Coast Ecosystem Restoration Council (Parts 5900—5999)

Title 3—The President

I Executive Office of the President (Parts 100—199)

Title 4—Accounts

I Government Accountability Office (Parts 1—199)

Title 5—Administrative Personnel

I Office of Personnel Management (Parts 1—1199)
II Merit Systems Protection Board (Parts 1200—1299)
III Office of Management and Budget (Parts 1300—1399)
IV Office of Personnel Management and Office of the Director of National Intelligence (Parts 1400—1499)
V The International Organizations Employees Loyalty Board (Parts 1500—1599)
VI Federal Retirement Thrift Investment Board (Parts 1600—1699)
VIII Office of Special Counsel (Parts 1800—1899)
IX Appalachian Regional Commission (Parts 1900—1999)
XI Armed Forces Retirement Home (Parts 2100—2199)
XIV Federal Labor Relations Authority, General Counsel of the Federal Labor Relations Authority and Federal Service Impasses Panel (Parts 2400—2499)
XVI Office of Government Ethics (Parts 2600—2699)
XXI Department of the Treasury (Parts 3100—3199)
XXII Federal Deposit Insurance Corporation (Parts 3200—3299)
XXIII Department of Energy (Parts 3300—3399)
XXIV Federal Energy Regulatory Commission (Parts 3400—3499)
XXV Department of the Interior (Parts 3500—3599)
XXVI Department of Defense (Parts 3600—3699)
XXVIII Department of Justice (Parts 3800—3899)
Title 5—Administrative Personnel—Continued

XXIX Federal Communications Commission (Parts 3900—3999)
XXX Farm Credit System Insurance Corporation (Parts 4000—4099)
XXXI Farm Credit Administration (Parts 4100—4199)
XXXIII Overseas Private Investment Corporation (Parts 4300—4399)
XXXIV Securities and Exchange Commission (Parts 4400—4499)
XXXV Office of Personnel Management (Parts 4500—4599)
XXXVI Department of Homeland Security (Parts 4600—4699)
XXXVII Federal Election Commission (Parts 4700—4799)
XL Interstate Commerce Commission (Parts 5000—5099)
XLI Commodity Futures Trading Commission (Parts 5100—5199)
XLII Department of Labor (Parts 5200—5299)
XLIII National Science Foundation (Parts 5300—5399)
XLV Department of Health and Human Services (Parts 5500—5599)
XLVI Postal Rate Commission (Parts 5600—5699)
XLVII Federal Trade Commission (Parts 5700—5799)
XLVIII Nuclear Regulatory Commission (Parts 5800—5899)
XLIX Federal Labor Relations Authority (Parts 5900—5999)
L Department of Transportation (Parts 6000—6099)
LI Export-Import Bank of the United States (Parts 6200—6299)
LII Department of Education (Parts 6300—6399)
LIV Environmental Protection Agency (Parts 6400—6499)
LV National Endowment for the Arts (Parts 6500—6599)
LVI National Endowment for the Humanities (Parts 6600—6699)
LVII General Services Administration (Parts 6700—6799)
LVIII Board of Governors of the Federal Reserve System (Parts 6800—6899)
LIX National Aeronautics and Space Administration (Parts 6900—6999)
LX United States Postal Service (Parts 7000—7099)
LXI National Labor Relations Board (Parts 7100—7199)
LXII Equal Employment Opportunity Commission (Parts 7200—7299)
LXIII Inter-American Foundation (Parts 7300—7399)
LXIV Merit Systems Protection Board (Parts 7400—7499)
LXV Department of Housing and Urban Development (Parts 7500—7599)
LXVI National Archives and Records Administration (Parts 7600—7699)
LXVII Institute of Museum and Library Services (Parts 7700—7799)
LXVIII Commission on Civil Rights (Parts 7800—7899)
LXIX Tennessee Valley Authority (Parts 7900—7999)
LXX Court Services and Offender Supervision Agency for the District of Columbia (Parts 8000—8099)
LXXI Consumer Product Safety Commission (Parts 8100—8199)
LXXII Department of Agriculture (Parts 8300—8399)
LXXIV Federal Mine Safety and Health Review Commission (Parts 8400—8499)
Chap. Title 5—Administrative Personnel—Continued

LXXVI Federal Retirement Thrift Investment Board (Parts 8600—8699)
LXXVII Office of Management and Budget (Parts 8700—8799)
LXXX Federal Housing Finance Agency (Parts 9000—9099)
LXXXIII Special Inspector General for Afghanistan Reconstruction (Parts 9300—9399)
LXXXIV Bureau of Consumer Financial Protection (Parts 9400—9499)
LXXXVI National Credit Union Administration (Parts 9600—9699)
XCVII Council of the Inspectors General on Integrity and Efficiency (Parts 9800—9899)
XCIX Military Compensation and Retirement Modernization Commission (Parts 9900—9999)
C National Council on Disability (Parts 10000—10049)

Title 6—Domestic Security

I Department of Homeland Security, Office of the Secretary (Parts 1—199)
X Privacy and Civil Liberties Oversight Board (Parts 1000—1099)

Title 7—Agriculture

SUBTITLE A—Office of the Secretary of Agriculture (Parts 0—26)

SUBTITLE B—Regulations of the Department of Agriculture

I Agricultural Marketing Service (Standards, Inspections, Marketing Practices), Department of Agriculture (Parts 27—209)
II Food and Nutrition Service, Department of Agriculture (Parts 210—299)
III Animal and Plant Health Inspection Service, Department of Agriculture (Parts 300—399)
IV Federal Crop Insurance Corporation, Department of Agriculture (Parts 400—499)
V Agricultural Research Service, Department of Agriculture (Parts 500—599)
VI Natural Resources Conservation Service, Department of Agriculture (Parts 600—699)
VII Farm Service Agency, Department of Agriculture (Parts 700—799)
VIII Grain Inspection, Packers and Stockyards Administration (Federal Grain Inspection Service), Department of Agriculture (Parts 800—899)
IX Agricultural Marketing Service (Marketing Agreements and Orders; Fruits, Vegetables, Nuts), Department of Agriculture (Parts 900—999)
X Agricultural Marketing Service (Marketing Agreements and Orders; Milk), Department of Agriculture (Parts 1000—1199)
Title 7—Agriculture—Continued

XI Agricultural Marketing Service (Marketing Agreements and Orders; Miscellaneous Commodities), Department of Agriculture (Parts 1200—1299)

XIV Commodity Credit Corporation, Department of Agriculture (Parts 1400—1499)

XV Foreign Agricultural Service, Department of Agriculture (Parts 1500—1599)

XVI Rural Telephone Bank, Department of Agriculture (Parts 1600—1699)

XVII Rural Utilities Service, Department of Agriculture (Parts 1700—1799)

XVIII Rural Housing Service, Rural Business-Cooperative Service, Rural Utilities Service, and Farm Service Agency, Department of Agriculture (Parts 1800—2099)

XX Local Television Loan Guarantee Board (Parts 2200—2299)

XXV Office of Advocacy and Outreach, Department of Agriculture (Parts 2500—2599)

XXVI Office of Inspector General, Department of Agriculture (Parts 2600—2699)

XXVII Office of Information Resources Management, Department of Agriculture (Parts 2700—2799)

XXVIII Office of Operations, Department of Agriculture (Parts 2800—2899)

XXIX Office of Energy Policy and New Uses, Department of Agriculture (Parts 2900—2999)

XXX Office of the Chief Financial Officer, Department of Agriculture (Parts 3000—3099)

XXXI Office of Environmental Quality, Department of Agriculture (Parts 3100—3199)

XXXII Office of Procurement and Property Management, Department of Agriculture (Parts 3200—3299)

XXXIII Office of Transportation, Department of Agriculture (Parts 3300—3399)

XXXIV National Institute of Food and Agriculture (Parts 3400—3499)

XXXV Rural Housing Service, Department of Agriculture (Parts 3500—3599)

XXXVI National Agricultural Statistics Service, Department of Agriculture (Parts 3600—3699)

XXXVII Economic Research Service, Department of Agriculture (Parts 3700—3799)

XXXVIII World Agricultural Outlook Board, Department of Agriculture (Parts 3800—3899)

XLI [Reserved]

XLII Rural Business-Cooperative Service and Rural Utilities Service, Department of Agriculture (Parts 4200—4299)

Title 8—Aliens and Nationality

I Department of Homeland Security (Immigration and Naturalization) (Parts 1—499)
Title 8—Aliens and Nationality—Continued

V Executive Office for Immigration Review, Department of Justice (Parts 1000—1399)

Title 9—Animals and Animal Products

I Animal and Plant Health Inspection Service, Department of Agriculture (Parts 1—199)
II Grain Inspection, Packers and Stockyards Administration (Packers and Stockyards Programs), Department of Agriculture (Parts 200—299)
III Food Safety and Inspection Service, Department of Agriculture (Parts 300—599)

Title 10—Energy

I Nuclear Regulatory Commission (Parts 0—199)
II Department of Energy (Parts 200—699)
III Department of Energy (Parts 700—999)
X Department of Energy (General Provisions) (Parts 1000—1099)
XIII Nuclear Waste Technical Review Board (Parts 1300—1399)
XVII Defense Nuclear Facilities Safety Board (Parts 1700—1799)
XVIII Northeast Interstate Low-Level Radioactive Waste Commission (Parts 1800—1899)

Title 11—Federal Elections

I Federal Election Commission (Parts 1—9099)
II Election Assistance Commission (Parts 9400—9499)

Title 12—Banks and Banking

I Comptroller of the Currency, Department of the Treasury (Parts 1—199)
II Federal Reserve System (Parts 200—299)
III Federal Deposit Insurance Corporation (Parts 300—399)
IV Export-Import Bank of the United States (Parts 400—499)
V Office of Thrift Supervision, Department of the Treasury (Parts 500—599)
VI Farm Credit Administration (Parts 600—699)
VII National Credit Union Administration (Parts 700—799)
VIII Federal Financing Bank (Parts 800—899)
IX Federal Housing Finance Board (Parts 900—999)
X Bureau of Consumer Financial Protection (Parts 1000—1099)
XI Federal Financial Institutions Examination Council (Parts 1100—1199)
XII Federal Housing Finance Agency (Parts 1200—1299)
XIII Financial Stability Oversight Council (Parts 1300—1399)
XIV Farm Credit System Insurance Corporation (Parts 1400—1499)
Title 12—Banks and Banking—Continued

XV Department of the Treasury (Parts 1500—1599)
XVI Office of Financial Research (Parts 1600—1699)
XVII Office of Federal Housing Enterprise Oversight, Department of Housing and Urban Development (Parts 1700—1799)
XVIII Community Development Financial Institutions Fund, Department of the Treasury (Parts 1800—1899)

Title 13—Business Credit and Assistance

I Small Business Administration (Parts 1—199)
III Economic Development Administration, Department of Commerce (Parts 300—399)
IV Emergency Steel Guarantee Loan Board (Parts 400—499)
V Emergency Oil and Gas Guaranteed Loan Board (Parts 500—599)

Title 14—Aeronautics and Space

I Federal Aviation Administration, Department of Transportation (Parts 1—199)
II Office of the Secretary, Department of Transportation (Aviation Proceedings) (Parts 200—399)
III Commercial Space Transportation, Federal Aviation Administration, Department of Transportation (Parts 400—1199)
V National Aeronautics and Space Administration (Parts 1200—1299)
VI Air Transportation System Stabilization (Parts 1300—1399)

Title 15—Commerce and Foreign Trade

Subtitle A—Office of the Secretary of Commerce (Parts 0—29)
Subtitle B—Regulations Relating to Commerce and Foreign Trade
I Bureau of the Census, Department of Commerce (Parts 30—199)
II National Institute of Standards and Technology, Department of Commerce (Parts 200—299)
III International Trade Administration, Department of Commerce (Parts 300—399)
IV Foreign-Trade Zones Board, Department of Commerce (Parts 400—499)
VII Bureau of Industry and Security, Department of Commerce (Parts 700—799)
VIII Bureau of Economic Analysis, Department of Commerce (Parts 800—899)
IX National Oceanic and Atmospheric Administration, Department of Commerce (Parts 900—999)
XI Technology Administration, Department of Commerce (Parts 1100—1199)
XIII East-West Foreign Trade Board (Parts 1300—1399)
Title 15—Commerce and Foreign Trade—Continued

Chap. XIV Minority Business Development Agency (Parts 1400—1499)

Subtitle C—Regulations Relating to Foreign Trade Agreements

XX Office of the United States Trade Representative (Parts 2000—2099)

Subtitle D—Regulations Relating to Telecommunications and Information

XXIII National Telecommunications and Information Administration, Department of Commerce (Parts 2300—2399)

Title 16—Commercial Practices

I Federal Trade Commission (Parts 0—999)

II Consumer Product Safety Commission (Parts 1000—1799)

Title 17—Commodity and Securities Exchanges

I Commodity Futures Trading Commission (Parts 1—199)

II Securities and Exchange Commission (Parts 200—399)

IV Department of the Treasury (Parts 400—499)

Title 18—Conservation of Power and Water Resources

I Federal Energy Regulatory Commission, Department of Energy (Parts 1—399)

III Delaware River Basin Commission (Parts 400—499)

VI Water Resources Council (Parts 700—799)

VIII Susquehanna River Basin Commission (Parts 800—899)

XIII Tennessee Valley Authority (Parts 1300—1399)

Title 19—Customs Duties

I U.S. Customs and Border Protection, Department of Homeland Security; Department of the Treasury (Parts 0—199)

II United States International Trade Commission (Parts 200—299)

III International Trade Administration, Department of Commerce (Parts 300—399)

IV U.S. Immigration and Customs Enforcement, Department of Homeland Security (Parts 400—599)

Title 20—Employees' Benefits

I Office of Workers’ Compensation Programs, Department of Labor (Parts 1—199)

II Railroad Retirement Board (Parts 200—399)

III Social Security Administration (Parts 400—499)

IV Employees’ Compensation Appeals Board, Department of Labor (Parts 500—599)
Chap.

Title 20—Employees' Benefits—Continued

V Employment and Training Administration, Department of Labor (Parts 600—699)
VI Office of Workers' Compensation Programs, Department of Labor (Parts 700—799)
VII Benefits Review Board, Department of Labor (Parts 800—899)
VIII Joint Board for the Enrollment of Actuaries (Parts 900—999)
IX Office of the Assistant Secretary for Veterans' Employment and Training Service, Department of Labor (Parts 1000—1099)

Title 21—Food and Drugs

I Food and Drug Administration, Department of Health and Human Services (Parts 1—1299)
II Drug Enforcement Administration, Department of Justice (Parts 1300—1399)
III Office of National Drug Control Policy (Parts 1400—1499)

Title 22—Foreign Relations

I Department of State (Parts 1—199)
II Agency for International Development (Parts 200—299)
III Peace Corps (Parts 300—399)
IV International Joint Commission, United States and Canada (Parts 400—499)
V Broadcasting Board of Governors (Parts 500—599)
VI Overseas Private Investment Corporation (Parts 700—799)
IX Foreign Service Grievance Board (Parts 900—999)
X Inter-American Foundation (Parts 1000—1099)
XI International Boundary and Water Commission, United States and Mexico, United States Section (Parts 1100—1199)
XII United States International Development Cooperation Agency (Parts 1200—1299)
XIII Millennium Challenge Corporation (Parts 1300—1399)
XIV Foreign Service Labor Relations Board; Federal Labor Relations Authority; General Counsel of the Federal Labor Relations Authority; and the Foreign Service Impasse Disputes Panel (Parts 1400—1499)
XV African Development Foundation (Parts 1500—1599)
XVI Japan-United States Friendship Commission (Parts 1600—1699)
XVII United States Institute of Peace (Parts 1700—1799)

Title 23—Highways

I Federal Highway Administration, Department of Transportation (Parts 1—999)
II National Highway Traffic Safety Administration and Federal Highway Administration, Department of Transportation (Parts 1200—1299)
Title 23—Highways—Continued

III National Highway Traffic Safety Administration, Department of Transportation (Parts 1300—1399)

Title 24—Housing and Urban Development

SUBTITLE A—OFFICE OF THE SECRETARY, DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT (PARTS 0—99)

SUBTITLE B—REGULATIONS RELATING TO HOUSING AND URBAN DEVELOPMENT

I Office of Assistant Secretary for Equal Opportunity, Department of Housing and Urban Development (Parts 100—199)

II Office of Assistant Secretary for Housing-Federal Housing Commissioner, Department of Housing and Urban Development (Parts 200—299)

III Government National Mortgage Association, Department of Housing and Urban Development (Parts 300—399)

IV Office of Housing and Office of Multifamily Housing Assistance Restructuring, Department of Housing and Urban Development (Parts 400—499)

V Office of Assistant Secretary for Community Planning and Development, Department of Housing and Urban Development (Parts 500—599)

VI Office of Assistant Secretary for Community Planning and Development, Department of Housing and Urban Development (Parts 600—699) [Reserved]

VII Office of the Secretary, Department of Housing and Urban Development (Housing Assistance Programs and Public and Indian Housing Programs) (Parts 700—799)

VIII Office of the Assistant Secretary for Housing—Federal Housing Commissioner, Department of Housing and Urban Development (Section 8 Housing Assistance Programs, Section 202 Direct Loan Program, Section 202 Supportive Housing for the Elderly Program and Section 811 Supportive Housing for Persons With Disabilities Program) (Parts 800—899)

IX Office of Assistant Secretary for Public and Indian Housing, Department of Housing and Urban Development (Parts 900—1699)

X Office of Assistant Secretary for Housing—Federal Housing Commissioner, Department of Housing and Urban Development (Interstate Land Sales Registration Program) (Parts 1700—1799)

XII Office of Inspector General, Department of Housing and Urban Development (Parts 2000—2099)

XV Emergency Mortgage Insurance and Loan Programs, Department of Housing and Urban Development (Parts 2700—2799) [Reserved]

XX Office of Assistant Secretary for Housing—Federal Housing Commissioner, Department of Housing and Urban Development (Parts 3200—3899)

XXIV Board of Directors of the HOPE for Homeowners Program (Parts 4000—4099) [Reserved]

XXV Neighborhood Reinvestment Corporation (Parts 4100—4199)
Title 25—Indians

I Bureau of Indian Affairs, Department of the Interior (Parts 1—299)

II Indian Arts and Crafts Board, Department of the Interior (Parts 300—399)

III National Indian Gaming Commission, Department of the Interior (Parts 500—599)

IV Office of Navajo and Hopi Indian Relocation (Parts 700—799)

V Bureau of Indian Affairs, Department of the Interior, and Indian Health Service, Department of Health and Human Services (Part 900)

VI Office of the Assistant Secretary-Indian Affairs, Department of the Interior (Parts 1000—1199)

VII Office of the Special Trustee for American Indians, Department of the Interior (Parts 1200—1299)

Title 26—Internal Revenue

I Internal Revenue Service, Department of the Treasury (Parts 1—End)

Title 27—Alcohol, Tobacco Products and Firearms

I Alcohol and Tobacco Tax and Trade Bureau, Department of the Treasury (Parts 1—399)

II Bureau of Alcohol, Tobacco, Firearms, and Explosives, Department of Justice (Parts 400—699)

Title 28—Judicial Administration

I Department of Justice (Parts 0—299)

III Federal Prison Industries, Inc., Department of Justice (Parts 300—399)

V Bureau of Prisons, Department of Justice (Parts 500—599)

VI Offices of Independent Counsel, Department of Justice (Parts 600—699)

VII Office of Independent Counsel (Parts 700—799)

VIII Court Services and Offender Supervision Agency for the District of Columbia (Parts 800—899)

IX National Crime Prevention and Privacy Compact Council (Parts 900—999)

XI Department of Justice and Department of State (Parts 1100—1199)

Title 29—Labor

SUBTITLE A—OFFICE OF THE SECRETARY OF LABOR (PARTS 0—99)

SUBTITLE B—REGULATIONS RELATING TO LABOR

I National Labor Relations Board (Parts 100—199)
Title 29—Labor—Continued

II Office of Labor-Management Standards, Department of Labor (Parts 200—299)

III National Railroad Adjustment Board (Parts 300—399)

IV Office of Labor-Management Standards, Department of Labor (Parts 400—499)

V Wage and Hour Division, Department of Labor (Parts 500—899)

IX Construction Industry Collective Bargaining Commission (Parts 900—999)

X National Mediation Board (Parts 1200—1299)

XII Federal Mediation and Conciliation Service (Parts 1400—1499)

XIV Equal Employment Opportunity Commission (Parts 1600—1699)

XVII Occupational Safety and Health Administration, Department of Labor (Parts 1900—1999)

XX Occupational Safety and Health Review Commission (Parts 2200—2499)

XXV Employee Benefits Security Administration, Department of Labor (Parts 2500—2599)

XXVII Federal Mine Safety and Health Review Commission (Parts 2700—2799)

XL Pension Benefit Guaranty Corporation (Parts 4000—4999)

Title 30—Mineral Resources

I Mine Safety and Health Administration, Department of Labor (Parts 1—199)

II Bureau of Safety and Environmental Enforcement, Department of the Interior (Parts 200—299)

IV Geological Survey, Department of the Interior (Parts 400—499)

V Bureau of Ocean Energy Management, Department of the Interior (Parts 500—599)

VII Office of Surface Mining Reclamation and Enforcement, Department of the Interior (Parts 700—999)

XII Office of Natural Resources Revenue, Department of the Interior (Parts 1200—1299)

Title 31—Money and Finance: Treasury

SUBTITLE A—Office of the Secretary of the Treasury (Parts 0—50)

SUBTITLE B—Regulations Relating to Money and Finance

I Monetary Offices, Department of the Treasury (Parts 51—199)

II Fiscal Service, Department of the Treasury (Parts 200—399)

IV Secret Service, Department of the Treasury (Parts 400—499)

V Office of Foreign Assets Control, Department of the Treasury (Parts 500—599)

VI Bureau of Engraving and Printing, Department of the Treasury (Parts 600—699)

VII Federal Law Enforcement Training Center, Department of the Treasury (Parts 700—799)
Title 31—Money and Finance: Treasury—Continued

VIII Office of International Investment, Department of the Treasury (Parts 800—899)
IX Federal Claims Collection Standards (Department of the Treasury—Department of Justice) (Parts 900—999)
X Financial Crimes Enforcement Network, Department of the Treasury (Parts 1000—1099)

Title 32—National Defense

SUBTITLE A—DEPARTMENT OF DEFENSE
I Office of the Secretary of Defense (Parts 1—399)
V Department of the Army (Parts 400—699)
VI Department of the Navy (Parts 700—799)
VII Department of the Air Force (Parts 800—1099)

SUBTITLE B—OTHER REGULATIONS RELATING TO NATIONAL DEFENSE
XII Defense Logistics Agency (Parts 1200—1299)
XVI Selective Service System (Parts 1600—1699)
XVII Office of the Director of National Intelligence (Parts 1700—1799)
XVIII National Counterintelligence Center (Parts 1800—1899)
XIX Central Intelligence Agency (Parts 1900—1999)
XX Information Security Oversight Office, National Archives and Records Administration (Parts 2000—2099)
XXI National Security Council (Parts 2100—2199)
XXIV Office of Science and Technology Policy (Parts 2400—2499)
XXVII Office for Micronesian Status Negotiations (Parts 2700—2799)
XXVIII Office of the Vice President of the United States (Parts 2800—2899)

Title 33—Navigation and Navigable Waters

I Coast Guard, Department of Homeland Security (Parts 1—199)
II Corps of Engineers, Department of the Army (Parts 200—399)
IV Saint Lawrence Seaway Development Corporation, Department of Transportation (Parts 400—499)

Title 34—Education

SUBTITLE A—OFFICE OF THE SECRETARY, DEPARTMENT OF EDUCATION (PARTS 1—99)
SUBTITLE B—REGULATIONS OF THE OFFICES OF THE DEPARTMENT OF EDUCATION
I Office for Civil Rights, Department of Education (Parts 100—199)
II Office of Elementary and Secondary Education, Department of Education (Parts 200—299)
III Office of Special Education and Rehabilitative Services, Department of Education (Parts 300—399)
Title 34—Education—Continued

IV Office of Career, Technical and Adult Education, Department of Education (Parts 400—499)
V Office of Bilingual Education and Minority Languages Affairs, Department of Education (Parts 500—599) [Reserved]
VI Office of Postsecondary Education, Department of Education (Parts 600—699)
VII Office of Educational Research and Improvement, Department of Education (Parts 700—799) [Reserved]

SUBTITLE C—REGULATIONS RELATING TO EDUCATION
XI [Reserved]
XII National Council on Disability (Parts 1200—1299)

Title 35 [Reserved]

Title 36—Parks, Forests, and Public Property

I National Park Service, Department of the Interior (Parts 1—199)
II Forest Service, Department of Agriculture (Parts 200—299)
III Corps of Engineers, Department of the Army (Parts 300—399)
IV American Battle Monuments Commission (Parts 400—499)
V Smithsonian Institution (Parts 500—599)
VI [Reserved]
VII Library of Congress (Parts 700—799)
VIII Advisory Council on Historic Preservation (Parts 800—899)
IX Pennsylvania Avenue Development Corporation (Parts 900—999)
X Presidio Trust (Parts 1000—1099)
XI Architectural and Transportation Barriers Compliance Board (Parts 1100—1199)
XII National Archives and Records Administration (Parts 1200—1299)
XV Oklahoma City National Memorial Trust (Parts 1500—1599)
XVI Morris K. Udall Scholarship and Excellence in National Environmental Policy Foundation (Parts 1600—1699)

Title 37—Patents, Trademarks, and Copyrights

I United States Patent and Trademark Office, Department of Commerce (Parts 1—199)
II U.S. Copyright Office, Library of Congress (Parts 200—299)
III Copyright Royalty Board, Library of Congress (Parts 300—399)
IV Assistant Secretary for Technology Policy, Department of Commerce (Parts 400—599)

Title 38—Pensions, Bonuses, and Veterans’ Relief

I Department of Veterans Affairs (Parts 0—199)
II Armed Forces Retirement Home (Parts 200—299)
Title 39—Postal Service

I United States Postal Service (Parts 1–999)
III Postal Regulatory Commission (Parts 3000–3099)

Title 40—Protection of Environment

I Environmental Protection Agency (Parts 1–1099)
IV Environmental Protection Agency and Department of Justice (Parts 1400–1499)
V Council on Environmental Quality (Parts 1500–1599)
VI Chemical Safety and Hazard Investigation Board (Parts 1600–1699)
VII Environmental Protection Agency and Department of Defense; Uniform National Discharge Standards for Vessels of the Armed Forces (Parts 1700–1799)
VIII Gulf Coast Ecosystem Restoration Council (Parts 1800–1899)

Title 41—Public Contracts and Property Management

Subtitle A—Federal Procurement Regulations System [Note]
Subtitle B—Other Provisions Relating to Public Contracts
50 Public Contracts, Department of Labor (Parts 50–1—50–999)
51 Committee for Purchase From People Who Are Blind or Severely Disabled (Parts 51–1—51–99)
60 Office of Federal Contract Compliance Programs, Equal Employment Opportunity, Department of Labor (Parts 60–1–60–999)
61 Office of the Assistant Secretary for Veterans’ Employment and Training Service, Department of Labor (Parts 61–1–61–999)
62–100 [Reserved]
Subroutine C—Federal Property Management Regulations System
101 Federal Property Management Regulations (Parts 101–1–101–99)
102 Federal Management Regulation (Parts 102–1–102–299)
103–104 [Reserved]
105 General Services Administration (Parts 105–1–105–999)
109 Department of Energy Property Management Regulations (Parts 109–1–109–99)
114 Department of the Interior (Parts 114–1–114–99)
115 Environmental Protection Agency (Parts 115–1–115–99)
128 Department of Justice (Parts 128–1–128–99)
129–200 [Reserved]
Subroutine D—Other Provisions Relating to Property Management [Reserved]
Subroutine E—Federal Information Resources Management Regulations System [Reserved]
Subroutine F—Federal Travel Regulation System
300 General (Parts 300–1–300–99)
301 Temporary Duty (TDY) Travel Allowances (Parts 301–1–301–99)
Title 41—Public Contracts and Property Management—Continued

302 Relocation Allowances (Parts 302–1—302–99)
303 Payment of Expenses Connected with the Death of Certain Employees (Part 303–1—303–99)
304 Payment of Travel Expenses from a Non-Federal Source (Parts 304–1—304–99)

Title 42—Public Health

I Public Health Service, Department of Health and Human Services (Parts 1—199)
IV Centers for Medicare & Medicaid Services, Department of Health and Human Services (Parts 400—599)
V Office of Inspector General-Health Care, Department of Health and Human Services (Parts 1000—1999)

Title 43—Public Lands: Interior

SUBTITLE A—OFFICE OF THE SECRETARY OF THE INTERIOR (PARTS 1—199)
SUBTITLE B—REGULATIONS RELATING TO PUBLIC LANDS
I Bureau of Reclamation, Department of the Interior (Parts 400—999)
II Bureau of Land Management, Department of the Interior (Parts 1000—9999)
III Utah Reclamation Mitigation and Conservation Commission (Parts 10000—10099)

Title 44—Emergency Management and Assistance

I Federal Emergency Management Agency, Department of Homeland Security (Parts 0—399)
IV Department of Commerce and Department of Transportation (Parts 400—499)

Title 45—Public Welfare

SUBTITLE A—DEPARTMENT OF HEALTH AND HUMAN SERVICES (PARTS 1—199)
SUBTITLE B—REGULATIONS RELATING TO PUBLIC WELFARE
II Office of Family Assistance (Assistance Programs), Administration for Children and Families, Department of Health and Human Services (Parts 200—299)
III Office of Child Support Enforcement (Child Support Enforcement Program), Administration for Children and Families, Department of Health and Human Services (Parts 300—399)
IV Office of Refugee Resettlement, Administration for Children and Families, Department of Health and Human Services (Parts 400—499)
V Foreign Claims Settlement Commission of the United States, Department of Justice (Parts 500—599)
Title 45—Public Welfare—Continued

VI National Science Foundation (Parts 600—699)
VII Commission on Civil Rights (Parts 700—799)
VIII Office of Personnel Management (Parts 800—899)
X Office of Community Services, Administration for Children and Families, Department of Health and Human Services (Parts 1000—1099)
XI National Foundation on the Arts and the Humanities (Parts 1100—1199)
XII Corporation for National and Community Service (Parts 1200—1299)
XIII Office of Human Development Services, Department of Health and Human Services (Parts 1300—1399)
XVI Legal Services Corporation (Parts 1600—1699)
XVII National Commission on Libraries and Information Science (Parts 1700—1799)
XVIII Harry S. Truman Scholarship Foundation (Parts 1800—1899)
XXI Commission on Fine Arts (Parts 2100—2199)
XXIV James Madison Memorial Fellowship Foundation (Parts 2400—2499)
XXV Corporation for National and Community Service (Parts 2500—2599)

Title 46—Shipping

I Coast Guard, Department of Homeland Security (Parts 1—199)
II Maritime Administration, Department of Transportation (Parts 200—399)
III Coast Guard (Great Lakes Pilotage), Department of Homeland Security (Parts 400—499)
IV Federal Maritime Commission (Parts 500—599)

Title 47—Telecommunication

I Federal Communications Commission (Parts 0—199)
II Office of Science and Technology Policy and National Security Council (Parts 200—299)
III National Telecommunications and Information Administration, Department of Commerce (Parts 300—399)
IV National Telecommunications and Information Administration, Department of Commerce, and National Highway Traffic Safety Administration, Department of Transportation (Parts 400—499)

Title 48—Federal Acquisition Regulations System

1 Federal Acquisition Regulation (Parts 1—99)
2 Defense Acquisition Regulations System, Department of Defense (Parts 200—299)
Title 48—Federal Acquisition Regulations System—Continued

3 Health and Human Services (Parts 300—399)
4 Department of Agriculture (Parts 400—499)
5 General Services Administration (Parts 500—599)
6 Department of State (Parts 600—699)
7 Agency for International Development (Parts 700—799)
8 Department of Veterans Affairs (Parts 800—899)
9 Department of Energy (Parts 900—999)
10 Department of the Treasury (Parts 1000—1099)
12 Department of Transportation (Parts 1200—1299)
13 Department of Commerce (Parts 1300—1399)
14 Department of the Interior (Parts 1400—1499)
15 Environmental Protection Agency (Parts 1500—1599)
16 Office of Personnel Management, Federal Employees Health Benefits Acquisition Regulation (Parts 1600—1699)
17 Office of Personnel Management (Parts 1700—1799)
18 National Aeronautics and Space Administration (Parts 1800—1899)
19 Broadcasting Board of Governors (Parts 1900—1999)
20 Nuclear Regulatory Commission (Parts 2000—2099)
21 Office of Personnel Management, Federal Employees Group Life Insurance Federal Acquisition Regulation (Parts 2100—2199)
23 Social Security Administration (Parts 2300—2399)
24 Department of Housing and Urban Development (Parts 2400—2499)
25 National Science Foundation (Parts 2500—2599)
28 Department of Justice (Parts 2800—2899)
29 Department of Labor (Parts 2900—2999)
30 Department of Homeland Security, Homeland Security Acquisition Regulation (HSAR) (Parts 3000—3099)
34 Department of Education Acquisition Regulation (Parts 3400—3499)
51 Department of the Army Acquisition Regulations (Parts 5100—5199)
52 Department of the Navy Acquisition Regulations (Parts 5200—5299)
53 Department of the Air Force Federal Acquisition Regulation Supplement (Parts 5300—5399) [Reserved]
54 Defense Logistics Agency, Department of Defense (Parts 5400—5499)
57 African Development Foundation (Parts 5700—5799)
61 Civilian Board of Contract Appeals, General Services Administration (Parts 6100—6199)
63 Department of Transportation Board of Contract Appeals (Parts 6300—6399)
99 Cost Accounting Standards Board, Office of Federal Procurement Policy, Office of Management and Budget (Parts 9900—9999)
Title 49—Transportation

SUBTITLE A—Office of the Secretary of Transportation (Parts 1—99)

SUBTITLE B—Other Regulations Relating to Transportation

I Pipeline and Hazardous Materials Safety Administration, Department of Transportation (Parts 100—199)

II Federal Railroad Administration, Department of Transportation (Parts 200—299)

III Federal Motor Carrier Safety Administration, Department of Transportation (Parts 300—399)

IV Coast Guard, Department of Homeland Security (Parts 400—499)

V National Highway Traffic Safety Administration, Department of Transportation (Parts 500—599)

VI Federal Transit Administration, Department of Transportation (Parts 600—699)

VII National Railroad Passenger Corporation (AMTRAK) (Parts 700—799)

VIII National Transportation Safety Board (Parts 800—999)

X Surface Transportation Board (Parts 1000—1399)

XI Research and Innovative Technology Administration, Department of Transportation (Parts 1400—1499) [Reserved]

XII Transportation Security Administration, Department of Homeland Security (Parts 1500—1699)

Title 50—Wildlife and Fisheries

I United States Fish and Wildlife Service, Department of the Interior (Parts 1—199)

II National Marine Fisheries Service, National Oceanic and Atmospheric Administration, Department of Commerce (Parts 200—299)

III International Fishing and Related Activities (Parts 300—399)

IV Joint Regulations (United States Fish and Wildlife Service, Department of the Interior and National Marine Fisheries Service, National Oceanic and Atmospheric Administration, Department of Commerce); Endangered Species Committee Regulations (Parts 400—499)

V Marine Mammal Commission (Parts 500—599)

VI Fishery Conservation and Management, National Oceanic and Atmospheric Administration, Department of Commerce (Parts 600—699)
## Alphabetical List of Agencies Appearing in the CFR
### (Revised as of July 1, 2016)

<table>
<thead>
<tr>
<th>Agency</th>
<th>CFR Title, Subtitle or Chapter</th>
</tr>
</thead>
<tbody>
<tr>
<td>Administrative Committee of the Federal Register</td>
<td>1, I</td>
</tr>
<tr>
<td>Administrative Conference of the United States</td>
<td>1, III</td>
</tr>
<tr>
<td>Advisory Council on Historic Preservation</td>
<td>36, VIII</td>
</tr>
<tr>
<td>Advocacy and Outreach, Office of</td>
<td>7, XXV</td>
</tr>
<tr>
<td>Afghanistan Reconstruction, Special Inspector General for</td>
<td>5, LXXIII</td>
</tr>
<tr>
<td>African Development Foundation</td>
<td>22, XV</td>
</tr>
<tr>
<td>Federal Acquisition Regulation</td>
<td>48, 57</td>
</tr>
<tr>
<td>Agency for International Development</td>
<td>2, VII; 22, II</td>
</tr>
<tr>
<td>Federal Acquisition Regulation</td>
<td>48, 7</td>
</tr>
<tr>
<td>Agricultural Marketing Service</td>
<td>7, I, IX, X, XI</td>
</tr>
<tr>
<td>Agricultural Research Service</td>
<td>7, V</td>
</tr>
<tr>
<td>Agriculture Department</td>
<td>2, IV; 8, LXXIII</td>
</tr>
<tr>
<td>Advocacy and Outreach, Office of</td>
<td>7, XXV</td>
</tr>
<tr>
<td>Agricultural Marketing Service</td>
<td>7, I, IX, X, XI</td>
</tr>
<tr>
<td>Agricultural Research Service</td>
<td>7, V</td>
</tr>
<tr>
<td>Animal and Plant Health Inspection Service</td>
<td>7, III; 9, I</td>
</tr>
<tr>
<td>Chief Financial Officer, Office of</td>
<td>7, XXX</td>
</tr>
<tr>
<td>Commodity Credit Corporation</td>
<td>7, XIV</td>
</tr>
<tr>
<td>Economic Research Service</td>
<td>7, XXXVII</td>
</tr>
<tr>
<td>Energy Policy and New Uses, Office of</td>
<td>2, IX; 7, XXIX</td>
</tr>
<tr>
<td>Environmental Quality, Office of</td>
<td>7, XXXI</td>
</tr>
<tr>
<td>Farm Service Agency</td>
<td>7, VII, XVIII</td>
</tr>
<tr>
<td>Federal Acquisition Regulation</td>
<td>48, 4</td>
</tr>
<tr>
<td>Federal Crop Insurance Corporation</td>
<td>7, IV</td>
</tr>
<tr>
<td>Food and Nutrition Service</td>
<td>7, II</td>
</tr>
<tr>
<td>Food Safety and Inspection Service</td>
<td>9, III</td>
</tr>
<tr>
<td>Foreign Agricultural Service</td>
<td>7, XV</td>
</tr>
<tr>
<td>Forest Service</td>
<td>36, II</td>
</tr>
<tr>
<td>Grain Inspection, Packers and Stockyards Administration</td>
<td>7, VIII; 9, II</td>
</tr>
<tr>
<td>Information Resources Management, Office of</td>
<td>7, XXVII</td>
</tr>
<tr>
<td>Inspector General, Office of</td>
<td>7, XXVI</td>
</tr>
<tr>
<td>National Agricultural Library</td>
<td>7, XLI</td>
</tr>
<tr>
<td>National Agricultural Statistics Service</td>
<td>7, XXXVI</td>
</tr>
<tr>
<td>National Institute of Food and Agriculture</td>
<td>7, XXXVII</td>
</tr>
<tr>
<td>Natural Resources Conservation Service</td>
<td>7, VI</td>
</tr>
<tr>
<td>Operations, Office of</td>
<td>7, XXVIII</td>
</tr>
<tr>
<td>Procurement and Property Management, Office of</td>
<td>7, XXXII</td>
</tr>
<tr>
<td>Rural Business-Cooperative Service</td>
<td>7, XVIII, XLII</td>
</tr>
<tr>
<td>Rural Development Administration</td>
<td>7, XLI</td>
</tr>
<tr>
<td>Rural Housing Service</td>
<td>7, XVIII, XXXV</td>
</tr>
<tr>
<td>Rural Telephone Bank</td>
<td>7, X V</td>
</tr>
<tr>
<td>Rural Utilities Service</td>
<td>7, XVII, XVIII, XLII</td>
</tr>
<tr>
<td>Secretary of Agriculture, Office of</td>
<td>7, Subtitle A</td>
</tr>
<tr>
<td>Transportation, Office of</td>
<td>7, XXXIII</td>
</tr>
<tr>
<td>World Agricultural Outlook Board</td>
<td>7, XXXVIII</td>
</tr>
<tr>
<td>Air Force Department</td>
<td>32, VII</td>
</tr>
<tr>
<td>Federal Acquisition Regulation Supplement</td>
<td>48, 53</td>
</tr>
<tr>
<td>Air Transportation Stabilization Board</td>
<td>14, VI</td>
</tr>
<tr>
<td>Alcohol and Tobacco Tax and Trade Bureau</td>
<td>27, I</td>
</tr>
<tr>
<td>Alcohol, Tobacco, Firearms, and Explosives, Bureau of</td>
<td>27, II</td>
</tr>
<tr>
<td>AMTRAK</td>
<td>49, VII</td>
</tr>
<tr>
<td>American Battle Monuments Commission</td>
<td>36, IV</td>
</tr>
<tr>
<td>American Indians, Office of the Special Trustee</td>
<td>25, VII</td>
</tr>
</tbody>
</table>
Animal and Plant Health Inspection Service 7, III; 9, I
Appalachian Regional Commission 5, IX
Architectural and Transportation Barriers Compliance Board 36, XI
Arctic Research Commission 45, XXIII
Armed Forces Retirement Home 5, XI
Army Department 32, V
  Engineers, Corps of 33, II; 36, III
Federal Acquisition Regulation 48, 51
Bilingual Education and Minority Languages Affairs, Office of 34, V
Blind or Severely Disabled, Committee for Purchase from 41, 51
People Who Are
Broadcasting Board of Governors 22, V
Federal Acquisition Regulation 48, 19
Career, Technical and Adult Education, Office of 34, IV
Census Bureau 15, I
  Centers for Medicare & Medicaid Services 42, IV
Central Intelligence Agency 32, XIX
Chemical Safety and Hazardous Investigation Board 40, VI
Chief Financial Officer, Office of 7, XXX
Child Support Enforcement, Office of 45, III
Children and Families, Administration for 45, II, III, IV, X
Civil Rights, Commission on 5, LXXII; 45, VII
Civil Rights, Office for 34, I
Council of the Inspectors General on Integrity and Efficiency 5, XCVI
Court Services and Offender Supervision Agency for the 5, LXX
District of Columbia
Coast Guard 33, I; 46, I; 49, IV
  Coast Guard (Great Lakes Pilotage) 46, III
Commerce Department 2, XIII; 44, IV; 50, VI
  Census Bureau 15, I
  Economic Analysis, Bureau of 15, VIII
  Economic Development Administration 13, III
  Emergency Management and Assistance 44, IV
  Federal Acquisition Regulation 48, 13
  Foreign-Trade Zones Board 15, IV
  Industry and Security, Bureau of 15, VII
  International Trade Administration 15, III; 19, III
  National Institute of Standards and Technology 15, II
  National Marine Fisheries Service 50, II, IV
  National Oceanic and Atmospheric Administration 15, IX; 50, II, III, IV, VI
  National Telecommunications and Information Administration 15, XXIII; 47, III, IV
  Administration 15, IX
  National Weather Service 15, VI
  Patent and Trademark Office, United States 37, I
  Productivity, Technology and Innovation, Assistant Secretary for 37, IV
Secretary for
  Secretary of Commerce, Office of 15, Subtitle A
  Technology Administration 15, XI
  Technology Policy, Assistant Secretary for 37, IV
  Commercial Space Transportation 14, III
Commodity Credit Corporation 7, XIV
Commodity Futures Trading Commission 5, XLII; 17, I
Community Planning and Development, Office of Assistant Secretary for 24, V, VI
Community Services, Office of 45, X
Comptroller of the Currency 12, I
Construction Industry Collective Bargaining Commission 29, IX
Consumer Financial Protection Bureau 5, LXX XIV; 12, X
Consumer Product Safety Commission 5, LXXI; 16, II
Copyright Royalty Board 37, III
Corporation for National and Community Service 2, XXII; 45, XII, XXV
Cost Accounting Standards Board 48, 99
Council on Environmental Quality 40, V
Court Services and Offender Supervision Agency for the 5, LXX; 28, VIII
District of Columbia
Customs and Border Protection 19, I
Defense Contract Audit Agency 32, I
<table>
<thead>
<tr>
<th>Agency</th>
<th>CFR Title, Subtitle or Chapter</th>
</tr>
</thead>
<tbody>
<tr>
<td>Defense Department</td>
<td>2, XI; 5, XXVI; 32, Subtitle A; 40, VII</td>
</tr>
<tr>
<td>Advanced Research Projects Agency</td>
<td>32, 1</td>
</tr>
<tr>
<td>Air Force Department</td>
<td>32, VII</td>
</tr>
<tr>
<td>Army Department</td>
<td>32, V; 33, II; 36, III; 48, 51</td>
</tr>
<tr>
<td>Defense Acquisition Regulations System</td>
<td>48, 2</td>
</tr>
<tr>
<td>Defense Intelligence Agency</td>
<td>32, I</td>
</tr>
<tr>
<td>Defense Logistics Agency</td>
<td>32, I, XII; 48, 54</td>
</tr>
<tr>
<td>Engineers, Corps of</td>
<td>33, II; 36, III</td>
</tr>
<tr>
<td>National Imagery and Mapping Agency</td>
<td>32, I</td>
</tr>
<tr>
<td>Navy Department</td>
<td>32, VI; 48, 52</td>
</tr>
<tr>
<td>Secretary of Defense, Office of</td>
<td>2, XI; 32, I</td>
</tr>
<tr>
<td>Defense Contract Audit Agency</td>
<td>32, I</td>
</tr>
<tr>
<td>Defense Intelligence Agency</td>
<td>32, I</td>
</tr>
<tr>
<td>Defense Logistics Agency</td>
<td>32, XII; 48, 54</td>
</tr>
<tr>
<td>Defense Nuclear Facilities Safety Board</td>
<td>10, XVII</td>
</tr>
<tr>
<td>Delaware River Basin Commission</td>
<td>18, III</td>
</tr>
<tr>
<td>District of Columbia, Court Services and Offender Supervision Agency for the Drug Enforcement Administration</td>
<td>21, II</td>
</tr>
<tr>
<td>East-West Foreign Trade Board</td>
<td>15, XIII</td>
</tr>
<tr>
<td>Economic Analysis, Bureau of</td>
<td>15, VIII</td>
</tr>
<tr>
<td>Economic Development Administration</td>
<td>13, III</td>
</tr>
<tr>
<td>Economic Research Service</td>
<td>7, XXXVII</td>
</tr>
<tr>
<td>Education, Department of Bilingual Education and Minority Languages Affairs, Office of</td>
<td>2, XXXIV; 5, LIII</td>
</tr>
<tr>
<td>Career, Technical and Adult Education, Office of Civil Rights, Office for</td>
<td>34, IV</td>
</tr>
<tr>
<td>Educational Research and Improvement, Office of</td>
<td>34, I</td>
</tr>
<tr>
<td>Elementary and Secondary Education, Office of</td>
<td>34, VII</td>
</tr>
<tr>
<td>Federal Acquisition Regulation</td>
<td>48, 34</td>
</tr>
<tr>
<td>Postsecondary Education, Office of</td>
<td>34, VI</td>
</tr>
<tr>
<td>Secretary of Education, Office of</td>
<td>34, Subtitle A</td>
</tr>
<tr>
<td>Special Education and Rehabilitative Services, Office of</td>
<td>34, III</td>
</tr>
<tr>
<td>Career, Technical, and Adult Education, Office of</td>
<td>34, IV</td>
</tr>
<tr>
<td>Educational Research and Improvement, Office of</td>
<td>34, VII</td>
</tr>
<tr>
<td>Election Assistance Commission</td>
<td>2, LVIII; 11, II</td>
</tr>
<tr>
<td>Elementary and Secondary Education, Office of</td>
<td>34, II</td>
</tr>
<tr>
<td>Emergency Oil and Gas Guaranteed Loan Board</td>
<td>13, V</td>
</tr>
<tr>
<td>Emergency Steel Guarantee Loan Board</td>
<td>13, IV</td>
</tr>
<tr>
<td>Employee Benefits Security Administration</td>
<td>29, XXV</td>
</tr>
<tr>
<td>Employees' Compensation Appeals Board</td>
<td>20, IV</td>
</tr>
<tr>
<td>Employees Loyalty Board</td>
<td>5, V</td>
</tr>
<tr>
<td>Employment and Training Administration</td>
<td>20, V</td>
</tr>
<tr>
<td>Employment Standards Administration</td>
<td>20, VI</td>
</tr>
<tr>
<td>Endangered Species Committee</td>
<td>50, IV</td>
</tr>
<tr>
<td>Energy, Department of Federal Acquisition Regulation</td>
<td>2, IX; 5, XXIII; 10, II; III, X</td>
</tr>
<tr>
<td>Federal Energy Regulatory Commission</td>
<td>48, 9</td>
</tr>
<tr>
<td>Property Management Regulations</td>
<td>5, XXIV; 18, I</td>
</tr>
<tr>
<td>Energy, Office of</td>
<td>41, 109</td>
</tr>
<tr>
<td>Engineers, Corps of Engraving and Printing, Bureau of Environmental Protection Agency</td>
<td>7, XXIX</td>
</tr>
<tr>
<td>Environmental Quality, Office of</td>
<td>33, II; 36, III</td>
</tr>
<tr>
<td>Equal Employment Opportunity Commission</td>
<td>31, VI</td>
</tr>
<tr>
<td>Property Management Regulations</td>
<td>2, XV; 5, LIV; 40, I, IV, VII</td>
</tr>
<tr>
<td>Environmental Quality, Office of</td>
<td>48, 15</td>
</tr>
<tr>
<td>Executive Office of the President</td>
<td>41, 115</td>
</tr>
<tr>
<td>Equal Opportunity, Office of Assistant Secretary for</td>
<td>7, XXXI</td>
</tr>
<tr>
<td>Management and Budget, Office of</td>
<td>5, LXII; 29, XIV</td>
</tr>
<tr>
<td>Executive Office of the President</td>
<td>24, I</td>
</tr>
<tr>
<td>Environmental Quality, Council on</td>
<td>3, I</td>
</tr>
<tr>
<td>Environmental Quality, Office of</td>
<td>40, V</td>
</tr>
<tr>
<td>Management and Budget, Office of</td>
<td>2, Subtitle A; 5, III, LXXVII; 14, VI; 48, 99</td>
</tr>
<tr>
<td>Agency</td>
<td>CFR Title, Subtitle or Chapter</td>
</tr>
<tr>
<td>----------------------------------------------------------------------</td>
<td>-------------------------------</td>
</tr>
<tr>
<td>National Drug Control Policy, Office of</td>
<td>2, XXXVI; 21, III</td>
</tr>
<tr>
<td>National Security Council</td>
<td>32, XXI; 47, 2</td>
</tr>
<tr>
<td>Presidential Documents</td>
<td>3</td>
</tr>
<tr>
<td>Science and Technology Policy, Office of</td>
<td>32, XXIV; 47, II</td>
</tr>
<tr>
<td>Trade Representative, Office of the United States</td>
<td>15, XX</td>
</tr>
<tr>
<td>Export-Import Bank of the United States</td>
<td>2, XXXV; 5, LII; 12, IV</td>
</tr>
<tr>
<td>Family Assistance, Office of</td>
<td>45, II</td>
</tr>
<tr>
<td>Farm Credit Administration</td>
<td>5, XXXI; 12, VI</td>
</tr>
<tr>
<td>Farm Credit System Insurance Corporation</td>
<td>5, XXX; 12, XIV</td>
</tr>
<tr>
<td>Farm Service Agency</td>
<td>7, VII; XVIII</td>
</tr>
<tr>
<td>Federal Acquisition Regulation</td>
<td>48, I</td>
</tr>
<tr>
<td>Federal Aviation Administration</td>
<td>14, I</td>
</tr>
<tr>
<td>Commercial Space Transportation</td>
<td>14, III</td>
</tr>
<tr>
<td>Federal Claims Collection Standards</td>
<td>31, IX</td>
</tr>
<tr>
<td>Federal Communications Commission</td>
<td>5, XXIX; 47, I</td>
</tr>
<tr>
<td>Federal Contract Compliance Programs, Office of</td>
<td>41, I9</td>
</tr>
<tr>
<td>Federal Crop Insurance Corporation</td>
<td>7, IV</td>
</tr>
<tr>
<td>Federal Deposit Insurance Corporation</td>
<td>5, XXII; 12, III</td>
</tr>
<tr>
<td>Federal Election Commission</td>
<td>5, XXXVII; 11, I</td>
</tr>
<tr>
<td>Federal Emergency Management Agency</td>
<td>44, I</td>
</tr>
<tr>
<td>Federal Employees Group Life Insurance Federal Acquisition Regulation</td>
<td>48, 21</td>
</tr>
<tr>
<td>Federal Employees Health Benefits Acquisition Regulation</td>
<td>48, 16</td>
</tr>
<tr>
<td>Federal Energy Regulatory Commission</td>
<td>5, XXIV; 18, I</td>
</tr>
<tr>
<td>Federal Financial Institutions Examination Council</td>
<td>12, XI</td>
</tr>
<tr>
<td>Federal Financing Bank</td>
<td>12, VIII</td>
</tr>
<tr>
<td>Federal Highway Administration</td>
<td>23, I; II</td>
</tr>
<tr>
<td>Federal Home Loan Mortgage Corporation</td>
<td>1, IV</td>
</tr>
<tr>
<td>Federal Housing Enterprise Oversight Office</td>
<td>12, XVII</td>
</tr>
<tr>
<td>Federal Housing Finance Agency</td>
<td>5, LXXX; 12, XII</td>
</tr>
<tr>
<td>Federal Housing Finance Board</td>
<td>12, IX</td>
</tr>
<tr>
<td>Federal Labor Relations Authority</td>
<td>5, XIV; XLIX; 22, XIV</td>
</tr>
<tr>
<td>Federal Law Enforcement Training Center</td>
<td>31, VII</td>
</tr>
<tr>
<td>Federal Management Regulation</td>
<td>41, 102</td>
</tr>
<tr>
<td>Federal Maritime Commission</td>
<td>46, IV</td>
</tr>
<tr>
<td>Federal Mediation and Conciliation Service</td>
<td>29, XII</td>
</tr>
<tr>
<td>Federal Mine Safety and Health Review Commission</td>
<td>5, LXXIV; 29, XXVII</td>
</tr>
<tr>
<td>Federal Motor Carrier Safety Administration</td>
<td>49, III</td>
</tr>
<tr>
<td>Federal Prison Industries, Inc.</td>
<td>28, III</td>
</tr>
<tr>
<td>Federal Procurement Policy Office</td>
<td>48, 99</td>
</tr>
<tr>
<td>Federal Property Management Regulations</td>
<td>41, 101</td>
</tr>
<tr>
<td>Federal Railroad Administration</td>
<td>49, II</td>
</tr>
<tr>
<td>Federal Register, Administrative Committee of</td>
<td>1, I</td>
</tr>
<tr>
<td>Federal Register, Office of</td>
<td>1, II</td>
</tr>
<tr>
<td>Federal Reserve System</td>
<td>12, II</td>
</tr>
<tr>
<td>Board of Governors</td>
<td>5, LVII</td>
</tr>
<tr>
<td>Federal Retirement Thrift Investment Board</td>
<td>5, VI; LXXVI</td>
</tr>
<tr>
<td>Federal Service Impasses Panel</td>
<td>5, XIV</td>
</tr>
<tr>
<td>Federal Trade Commission</td>
<td>5, XLVII; 16, I</td>
</tr>
<tr>
<td>Federal Transit Administration</td>
<td>49, VI</td>
</tr>
<tr>
<td>Federal Travel Regulation System</td>
<td>41, Subtitle F</td>
</tr>
<tr>
<td>Financial Crimes Enforcement Network</td>
<td>31, X</td>
</tr>
<tr>
<td>Financial Research Office</td>
<td>12, XVI</td>
</tr>
<tr>
<td>Financial Stability Oversight Council</td>
<td>12, XIII</td>
</tr>
<tr>
<td>Fine Arts, Commission on</td>
<td>45, XXI</td>
</tr>
<tr>
<td>Fiscal Service</td>
<td>31, II</td>
</tr>
<tr>
<td>Fish and Wildlife Service, United States</td>
<td>50, I, IV</td>
</tr>
<tr>
<td>Food and Drug Administration</td>
<td>21, I</td>
</tr>
<tr>
<td>Food and Nutrition Service</td>
<td>7, II</td>
</tr>
<tr>
<td>Food Safety and Inspection Service</td>
<td>9, III</td>
</tr>
<tr>
<td>Foreign Agricultural Service</td>
<td>7, XV</td>
</tr>
<tr>
<td>Foreign Assets Control, Office of</td>
<td>31, V</td>
</tr>
<tr>
<td>Foreign Claims Settlement Commission of the United States</td>
<td>45, V</td>
</tr>
<tr>
<td>Foreign Service Grievance Board</td>
<td>22, IX</td>
</tr>
<tr>
<td>Foreign Service Impasses Disputes Panel</td>
<td>22, XIV</td>
</tr>
<tr>
<td>Foreign Service Labor Relations Board</td>
<td>22, XIV</td>
</tr>
<tr>
<td>Foreign-Trade Zones Board</td>
<td>15, IV</td>
</tr>
<tr>
<td>Agency</td>
<td>CFR Title, Subtitle or Chapter</td>
</tr>
<tr>
<td>----------------------------------------------------------------------</td>
<td>--------------------------------</td>
</tr>
<tr>
<td>Forest Service</td>
<td>36, II</td>
</tr>
<tr>
<td>General Services Administration</td>
<td>5, LVII; 41, 105</td>
</tr>
<tr>
<td>Contract Appeals, Board of</td>
<td>48, 61</td>
</tr>
<tr>
<td>Federal Acquisition Regulation</td>
<td>48, 5</td>
</tr>
<tr>
<td>Federal Management Regulation</td>
<td>41, 102</td>
</tr>
<tr>
<td>Federal Property Management Regulations</td>
<td>41, 101</td>
</tr>
<tr>
<td>Federal Travel Regulation System</td>
<td>41, Subtitle F</td>
</tr>
<tr>
<td>General</td>
<td>41, 300</td>
</tr>
<tr>
<td>Payment From a Non-Federal Source for Travel Expenses</td>
<td>41, 304</td>
</tr>
<tr>
<td>Payment of Expenses Connected With the Death of Certain Employees</td>
<td>41, 303</td>
</tr>
<tr>
<td>Relocation Allowances</td>
<td>41, 302</td>
</tr>
<tr>
<td>Temporary Duty (TDY) Travel Allowances</td>
<td>41, 301</td>
</tr>
<tr>
<td>Geological Survey</td>
<td>30, IV</td>
</tr>
<tr>
<td>Government Accountability Office</td>
<td>4, I</td>
</tr>
<tr>
<td>Government Ethics, Office of</td>
<td>5, XVI</td>
</tr>
<tr>
<td>Government National Mortgage Association</td>
<td>24, III</td>
</tr>
<tr>
<td>Grain Inspection, Packers and Stockyards Administration</td>
<td>7, VIII; 9, II</td>
</tr>
<tr>
<td>Gulf Coast Ecosystem Restoration Council</td>
<td>2, LIX; 49, VIII</td>
</tr>
<tr>
<td>Harry S. Truman Scholarship Foundation</td>
<td>45, XVIII</td>
</tr>
<tr>
<td>Health and Human Services, Department of</td>
<td>2, III; 5, XLV; 45, Subtitle A,</td>
</tr>
<tr>
<td>Centers for Medicare &amp; Medicaid Services</td>
<td>42, IV</td>
</tr>
<tr>
<td>Child Support Enforcement, Office of</td>
<td>45, III</td>
</tr>
<tr>
<td>Children and Families, Administration for</td>
<td>45, II, III, IV, X</td>
</tr>
<tr>
<td>Community Services, Office of</td>
<td>45, X</td>
</tr>
<tr>
<td>Family Assistance, Office of</td>
<td>45, II</td>
</tr>
<tr>
<td>Federal Acquisition Regulation</td>
<td>48, 3</td>
</tr>
<tr>
<td>Food and Drug Administration</td>
<td>21, I</td>
</tr>
<tr>
<td>Human Development Services, Office of</td>
<td>45, XIII</td>
</tr>
<tr>
<td>Indian Health Service</td>
<td>25, V</td>
</tr>
<tr>
<td>Inspector General (Health Care), Office of</td>
<td>42, V</td>
</tr>
<tr>
<td>Public Health Service</td>
<td>42, I</td>
</tr>
<tr>
<td>Refugee Resettlement, Office of</td>
<td>45, IV</td>
</tr>
<tr>
<td>Homeland Security, Department of</td>
<td>2, XXX; 5, XXXVI; 6, I; 8, I</td>
</tr>
<tr>
<td>Coast Guard</td>
<td>33, I; 46, I; 49, IV</td>
</tr>
<tr>
<td>Coast Guard (Great Lakes Pilotage)</td>
<td>46, III</td>
</tr>
<tr>
<td>Customs and Border Protection</td>
<td>19, I</td>
</tr>
<tr>
<td>Federal Emergency Management Agency</td>
<td>44, I</td>
</tr>
<tr>
<td>Human Resources Management and Labor Relations Systems</td>
<td>5, XCVII</td>
</tr>
<tr>
<td>Immigration and Customs Enforcement Bureau</td>
<td>19, IV</td>
</tr>
<tr>
<td>Transportation Security Administration</td>
<td>49, XII</td>
</tr>
<tr>
<td>HOPE for Homeowners Program, Board of Directors of</td>
<td>24, XXIV</td>
</tr>
<tr>
<td>Housing and Urban Development, Department of</td>
<td>2, XXIV; 5, LXV; 24, Subtitle B</td>
</tr>
<tr>
<td>Community Planning and Development, Office of Assistant Secretary for</td>
<td>24, V, VI</td>
</tr>
<tr>
<td>Equal Opportunity, Office of Assistant Secretary for</td>
<td>24, I</td>
</tr>
<tr>
<td>Federal Acquisition Regulation</td>
<td>48, 24</td>
</tr>
<tr>
<td>Federal Housing Enterprise Oversight, Office of</td>
<td>12, XVII</td>
</tr>
<tr>
<td>Government National Mortgage Association</td>
<td>24, III</td>
</tr>
<tr>
<td>Housing—Federal Housing Commissioner, Office of Assistant Secretary for Housing, Office of, and Multifamily Housing Assistance</td>
<td>24, IV</td>
</tr>
<tr>
<td>Restructuring, Office of</td>
<td>24, XII</td>
</tr>
<tr>
<td>Inspector General, Office of</td>
<td>24, IX</td>
</tr>
<tr>
<td>Public and Indian Housing, Office of Assistant Secretary for</td>
<td>24, Subtitle A, VII</td>
</tr>
<tr>
<td>Secretary, Office of</td>
<td>24, II, VIII, X, XX</td>
</tr>
<tr>
<td>Housing—Federal Housing Commissioner, Office of Assistant Secretary for Housing, Office of, and Multifamily Housing Assistance</td>
<td>24, IV</td>
</tr>
<tr>
<td>Restructuring, Office of</td>
<td>24, XII</td>
</tr>
<tr>
<td>Human Development Services, Office of</td>
<td>45, XIII</td>
</tr>
<tr>
<td>Immigration and Customs Enforcement Bureau</td>
<td>19, IV</td>
</tr>
<tr>
<td>Immigration Review, Executive Office for</td>
<td>8, V</td>
</tr>
<tr>
<td>Agency</td>
<td>CFR Title, Subtitle or Chapter</td>
</tr>
<tr>
<td>----------------------------------------------------------------------</td>
<td>-------------------------------</td>
</tr>
<tr>
<td>Independent Counsel, Office of</td>
<td>28, VII</td>
</tr>
<tr>
<td>Independent Counsel, Offices of</td>
<td>28, VI</td>
</tr>
<tr>
<td>Indian Affairs, Bureau of</td>
<td>25, I, V</td>
</tr>
<tr>
<td>Indian Affairs, Office of the Assistant Secretary</td>
<td>25, VI</td>
</tr>
<tr>
<td>Indian Arts and Crafts Board</td>
<td>25, II</td>
</tr>
<tr>
<td>Indian Health Service</td>
<td>25, V</td>
</tr>
<tr>
<td>Industry and Security, Bureau of</td>
<td>15, VII</td>
</tr>
<tr>
<td>Information Resources Management, Office of</td>
<td>7, XXVII</td>
</tr>
<tr>
<td>Information Security Oversight Office, National Archives and Records Administration</td>
<td>32, XX</td>
</tr>
<tr>
<td>Records Administration</td>
<td></td>
</tr>
<tr>
<td>Inspector General</td>
<td></td>
</tr>
<tr>
<td>Agriculture Department</td>
<td>7, XXVI</td>
</tr>
<tr>
<td>Health and Human Services Department</td>
<td>42, V</td>
</tr>
<tr>
<td>Housing and Urban Development Department</td>
<td>24, XII, XV</td>
</tr>
<tr>
<td>Institute of Peace, United States</td>
<td>22, XVII</td>
</tr>
<tr>
<td>Inter-American Foundation</td>
<td>5, LXIII; 22, X</td>
</tr>
<tr>
<td>Interior Department</td>
<td></td>
</tr>
<tr>
<td>American Indians, Office of the Special Trustee</td>
<td>25, VII</td>
</tr>
<tr>
<td>Endangered Species Committee</td>
<td>50, IV</td>
</tr>
<tr>
<td>Federal Acquisition Regulation</td>
<td>48, 14</td>
</tr>
<tr>
<td>Federal Property Management Regulations System</td>
<td>41, 114</td>
</tr>
<tr>
<td>Fish and Wildlife Service, United States</td>
<td>50, I, IV</td>
</tr>
<tr>
<td>Geological Survey</td>
<td>30, IV</td>
</tr>
<tr>
<td>Indian Affairs, Bureau of</td>
<td>25, I, V</td>
</tr>
<tr>
<td>Indian Affairs, Office of the Assistant Secretary</td>
<td>25, VI</td>
</tr>
<tr>
<td>Indian Arts and Crafts Board</td>
<td>25, II</td>
</tr>
<tr>
<td>Land Management, Bureau of</td>
<td>43, II</td>
</tr>
<tr>
<td>National Indian Gaming Commission</td>
<td>25, III</td>
</tr>
<tr>
<td>National Park Service</td>
<td>36, I</td>
</tr>
<tr>
<td>Natural Resource Revenue, Office of</td>
<td>30, XII</td>
</tr>
<tr>
<td>Ocean Energy Management, Bureau of</td>
<td>30, V</td>
</tr>
<tr>
<td>Reclamation, Bureau of</td>
<td>43, I</td>
</tr>
<tr>
<td>Safety and Enforcement Bureau, Bureau of</td>
<td>30, II</td>
</tr>
<tr>
<td>Secretary of the Interior, Office of</td>
<td>2, XIV; 43, Subtitle A</td>
</tr>
<tr>
<td>Surface Mining Reclamation and Enforcement, Office of</td>
<td>30, VII</td>
</tr>
<tr>
<td>Internal Revenue Service</td>
<td>26, I</td>
</tr>
<tr>
<td>International Boundary and Water Commission, United States and Mexico, United States Section</td>
<td>22, XI</td>
</tr>
<tr>
<td>International Development, United States Agency for</td>
<td>22, II</td>
</tr>
<tr>
<td>Federal Acquisition Regulation</td>
<td>48, 7</td>
</tr>
<tr>
<td>International Development Cooperation Agency, United States</td>
<td>22, XII</td>
</tr>
<tr>
<td>States</td>
<td></td>
</tr>
<tr>
<td>International Joint Commission, United States and Canada</td>
<td>22, IV</td>
</tr>
<tr>
<td>International Organizations Employees Loyalty Board</td>
<td>5, V</td>
</tr>
<tr>
<td>International Trade Administration</td>
<td>15, III; 19, III</td>
</tr>
<tr>
<td>International Trade Commission, United States</td>
<td>19, II</td>
</tr>
<tr>
<td>Interstate Commerce Commission</td>
<td>5, XL</td>
</tr>
<tr>
<td>Investment Security, Office of</td>
<td>31, VIII</td>
</tr>
<tr>
<td>James Madison Memorial Fellowship Foundation</td>
<td>45, XXIV</td>
</tr>
<tr>
<td>Japan–United States Friendship Commission</td>
<td>22, XVI</td>
</tr>
<tr>
<td>Joint Board for the Enrollment of Actuaries</td>
<td>20, VIII</td>
</tr>
<tr>
<td>Justice Department</td>
<td>2, XXVIII; 5, XXVIII; 28, I, XI; 40, IV</td>
</tr>
<tr>
<td>Alcohol, Tobacco, Firearms, and Explosives, Bureau of</td>
<td>27, II</td>
</tr>
<tr>
<td>Drug Enforcement Administration</td>
<td>21, II</td>
</tr>
<tr>
<td>Federal Acquisition Regulation</td>
<td>48, 28</td>
</tr>
<tr>
<td>Federal Claims Collection Standards</td>
<td>31, IX</td>
</tr>
<tr>
<td>Federal Prison Industries, Inc.</td>
<td>26, III</td>
</tr>
<tr>
<td>Foreign Claims Settlement Commission of the United States</td>
<td>45, V</td>
</tr>
<tr>
<td>Immigration Review, Executive Office for</td>
<td>8, V</td>
</tr>
<tr>
<td>Independent Counsel, Offices of</td>
<td>28, VI</td>
</tr>
<tr>
<td>Prisons, Bureau of</td>
<td>29, V</td>
</tr>
<tr>
<td>Property Management Regulations</td>
<td>41, 128</td>
</tr>
<tr>
<td>Labor Department</td>
<td>2, XXIX; 5, XLII</td>
</tr>
<tr>
<td>Employee Benefits Security Administration</td>
<td>29, XXV</td>
</tr>
<tr>
<td>Employees’ Compensation Appeals Board</td>
<td>20, IV</td>
</tr>
<tr>
<td>Agency</td>
<td>CFR Title, Subtitle or Chapter</td>
</tr>
<tr>
<td>-----------------------------------------------------------------------</td>
<td>-------------------------------</td>
</tr>
<tr>
<td>Employment and Training Administration</td>
<td>20, V</td>
</tr>
<tr>
<td>Employment Standards Administration</td>
<td>20, VI</td>
</tr>
<tr>
<td>Federal Acquisition Regulation</td>
<td>48, 29</td>
</tr>
<tr>
<td>Federal Contract Compliance Programs, Office of</td>
<td>41, 60</td>
</tr>
<tr>
<td>Federal Procurement Regulations System</td>
<td>41, 50</td>
</tr>
<tr>
<td>Labor-Management Standards, Office of</td>
<td>29, II, IV</td>
</tr>
<tr>
<td>Mine Safety and Health Administration</td>
<td>30, I</td>
</tr>
<tr>
<td>Occupational Safety and Health Administration</td>
<td>29, XVII</td>
</tr>
<tr>
<td>Public Contracts</td>
<td>41, 50</td>
</tr>
<tr>
<td>Secretary of Labor, Office of</td>
<td>29, Subtitle A</td>
</tr>
<tr>
<td>Veterans' Employment and Training Service, Office of the Assistant Secretary for</td>
<td>41, 61; 20, IX</td>
</tr>
<tr>
<td>Wage and Hour Division</td>
<td>29, V</td>
</tr>
<tr>
<td>Workers' Compensation Programs, Office of</td>
<td>20, I, VII</td>
</tr>
<tr>
<td>Labor-Management Standards, Office of</td>
<td>29, II, IV</td>
</tr>
<tr>
<td>Land Management, Bureau of</td>
<td>43, H</td>
</tr>
<tr>
<td>Legal Services Corporation</td>
<td>45, XVI</td>
</tr>
<tr>
<td>Library of Congress</td>
<td>36, VII</td>
</tr>
<tr>
<td>Copyright Royalty Board</td>
<td>37, III</td>
</tr>
<tr>
<td>U.S. Copyright Office</td>
<td>37, H</td>
</tr>
<tr>
<td>Local Television Loan Guarantee Board</td>
<td>7, XX</td>
</tr>
<tr>
<td>Management and Budget, Office of</td>
<td>5, III, LXXVII; 14, VI; 48, 99</td>
</tr>
<tr>
<td>Marine Mammal Commission</td>
<td>50, V</td>
</tr>
<tr>
<td>Maritime Administration</td>
<td>46, II</td>
</tr>
<tr>
<td>Merit Systems Protection Board</td>
<td>5, II, LXIV</td>
</tr>
<tr>
<td>Micronesian Status Negotiations, Office for</td>
<td>32, XXVII</td>
</tr>
<tr>
<td>Military Compensation and Retirement Modernization</td>
<td>5, XCIX</td>
</tr>
<tr>
<td>Commission</td>
<td></td>
</tr>
<tr>
<td>Millennium Challenge Corporation</td>
<td>22, XIII</td>
</tr>
<tr>
<td>Mine Safety and Health Administration</td>
<td>30, I</td>
</tr>
<tr>
<td>Minority Business Development Agency</td>
<td>15, XIV</td>
</tr>
<tr>
<td>Miscellaneous Agencies</td>
<td>1, IV</td>
</tr>
<tr>
<td>Monetary Office</td>
<td>31, I</td>
</tr>
<tr>
<td>Morris K. Udall Scholarship and Excellence in National Environmental</td>
<td>36, XVI</td>
</tr>
<tr>
<td>Policy Foundation</td>
<td></td>
</tr>
<tr>
<td>Museum and Library Services, Institute of</td>
<td>2, XXXI</td>
</tr>
<tr>
<td>National Aeronautics and Space Administration</td>
<td>2, XVIII; 5, LIX; 14, V</td>
</tr>
<tr>
<td>Federal Acquisition Regulation</td>
<td>48, 18</td>
</tr>
<tr>
<td>National Agricultural Library</td>
<td>7, XLI</td>
</tr>
<tr>
<td>National Agricultural Statistics Service</td>
<td>7, XXXVI</td>
</tr>
<tr>
<td>National and Community Service, Corporation for</td>
<td>2, XXII; 45, XII, XXV</td>
</tr>
<tr>
<td>National Archives and Records Administration</td>
<td>2, XXVII; 5, LXVI; 36, XII</td>
</tr>
<tr>
<td>Information Security Oversight Office</td>
<td>32, XX</td>
</tr>
<tr>
<td>National Capital Planning Commission</td>
<td>1, IV</td>
</tr>
<tr>
<td>National Commission for Employment Policy</td>
<td>1, IV</td>
</tr>
<tr>
<td>National Commission on Libraries and Information Science</td>
<td>45, XVII</td>
</tr>
<tr>
<td>National Council on Disability</td>
<td>5, C, 31, XII</td>
</tr>
<tr>
<td>National Counterintelligence Center</td>
<td>32, XVIII</td>
</tr>
<tr>
<td>National Credit Union Administration</td>
<td>5, LXXXVI; 12, VII</td>
</tr>
<tr>
<td>National Crime Prevention and Privacy Compact Council</td>
<td>28, IX</td>
</tr>
<tr>
<td>National Drug Control Policy, Office of</td>
<td>2, XXXVI; 21, III</td>
</tr>
<tr>
<td>National Endowment for the Arts</td>
<td>2, XXXII</td>
</tr>
<tr>
<td>National Endowment for the Humanities</td>
<td>2, XXXIII</td>
</tr>
<tr>
<td>National Foundation on the Arts and the Humanities</td>
<td>45, XI</td>
</tr>
<tr>
<td>National Geospatial-Intelligence Agency</td>
<td>32, I</td>
</tr>
<tr>
<td>National Highway Traffic Safety Administration</td>
<td>23, II; III; 47, VI; 49, V</td>
</tr>
<tr>
<td>National Imagery and Mapping Agency</td>
<td>32, I</td>
</tr>
<tr>
<td>National Indian Gaming Commission</td>
<td>25, III</td>
</tr>
<tr>
<td>National Institute of Food and Agriculture</td>
<td>7, XXXIV</td>
</tr>
<tr>
<td>National Institute of Standards and Technology</td>
<td>15, II</td>
</tr>
<tr>
<td>National Intelligence, Office of Director of</td>
<td>5, IV; 32, XVII</td>
</tr>
<tr>
<td>National Labor Relations Board</td>
<td>5, LXI; 29, I</td>
</tr>
<tr>
<td>National Marine Fisheries Service</td>
<td>50, II, IV</td>
</tr>
<tr>
<td>National Mediation Board</td>
<td>29, X</td>
</tr>
<tr>
<td>National Oceanic and Atmospheric Administration</td>
<td>15, IX; 50, II, III, IV, VI</td>
</tr>
<tr>
<td>Agency</td>
<td>CFR Title, Subtitle or Chapter</td>
</tr>
<tr>
<td>--------</td>
<td>--------------------------------</td>
</tr>
<tr>
<td>National Park Service</td>
<td>36, I</td>
</tr>
<tr>
<td>National Railroad Adjustment Board</td>
<td>29, III</td>
</tr>
<tr>
<td>National Railroad Passenger Corporation (AMTRAK)</td>
<td>49, VII</td>
</tr>
<tr>
<td>National Science Foundation</td>
<td>2, XXV; 5, XLIII; 45, VI</td>
</tr>
<tr>
<td>Federal Acquisition Regulation</td>
<td>48, 25</td>
</tr>
<tr>
<td>National Security Council</td>
<td>32, XXI</td>
</tr>
<tr>
<td>National Security Council and Office of Science and Technology Policy</td>
<td>47, II</td>
</tr>
<tr>
<td>National Telecommunications and Information Administration</td>
<td>15, XXIII; 47, III, IV</td>
</tr>
<tr>
<td>National Transportation Safety Board</td>
<td>49, VIII</td>
</tr>
<tr>
<td>Natural Resources Conservation Service</td>
<td>7, VI</td>
</tr>
<tr>
<td>Natural Resource Revenue, Office of</td>
<td>30, XII</td>
</tr>
<tr>
<td>Navajo and Hopi Indian Relocation, Office of</td>
<td>25, IV</td>
</tr>
<tr>
<td>Navy Department</td>
<td>32, VI</td>
</tr>
<tr>
<td>Federal Acquisition Regulation</td>
<td>48, 52</td>
</tr>
<tr>
<td>Neighborhood Reinvestment Corporation</td>
<td>24, XXV</td>
</tr>
<tr>
<td>Northeast Interstate Low-Level Radioactive Waste Commission</td>
<td>10, XVIII</td>
</tr>
<tr>
<td>Nuclear Regulatory Commission</td>
<td>2, XX; 5, XLVIII; 10, I</td>
</tr>
<tr>
<td>Federal Acquisition Regulation</td>
<td>48, 20</td>
</tr>
<tr>
<td>Occupational Safety and Health Administration</td>
<td>29, XVII</td>
</tr>
<tr>
<td>Occupational Safety and Health Review Commission</td>
<td>29, XX</td>
</tr>
<tr>
<td>Ocean Energy Management, Bureau of</td>
<td>30, V</td>
</tr>
<tr>
<td>Oklahoma City National Memorial Trust</td>
<td>36, XV</td>
</tr>
<tr>
<td>Operations Office</td>
<td>7, XXVIII</td>
</tr>
<tr>
<td>Overseas Private Investment Corporation</td>
<td>5, XXXIII; 22, VII</td>
</tr>
<tr>
<td>Patent and Trademark Office, United States</td>
<td>37, I</td>
</tr>
<tr>
<td>Payment From a Non-Federal Source for Travel Expenses</td>
<td>41, 304</td>
</tr>
<tr>
<td>Payment of Expenses Connected With the Death of Certain Employees</td>
<td>41, 303</td>
</tr>
<tr>
<td>Peace Corps</td>
<td>2, XXXVIII; 22, III</td>
</tr>
<tr>
<td>Pennsylvania Avenue Development Corporation</td>
<td>36, IX</td>
</tr>
<tr>
<td>Pension Benefit Guaranty Corporation</td>
<td>29, XL</td>
</tr>
<tr>
<td>Personnel Management, Office of</td>
<td>5, I, XXXV; 5, IV; 45, VIII</td>
</tr>
<tr>
<td>Human Resources Management and Labor Relations Systems, Department of Homeland Security</td>
<td>5, XCIVVII</td>
</tr>
<tr>
<td>Federal Acquisition Regulation</td>
<td>48, 21</td>
</tr>
<tr>
<td>Federal Employees Group Life Insurance Federal Acquisition Regulation</td>
<td>48, 21</td>
</tr>
<tr>
<td>Federal Employees Health Benefits Acquisition Regulation</td>
<td>48, 16</td>
</tr>
<tr>
<td>Pipeline and Hazardous Materials Safety Administration</td>
<td>49, I</td>
</tr>
<tr>
<td>Postal Regulatory Commission</td>
<td>5, XLVI; 39, III</td>
</tr>
<tr>
<td>Postal Service, United States</td>
<td>5, LX; 39, I</td>
</tr>
<tr>
<td>Postsecondary Education, Office of</td>
<td>34, VI</td>
</tr>
<tr>
<td>President’s Commission on White House Fellowships</td>
<td>1, IV</td>
</tr>
<tr>
<td>Presidential Documents</td>
<td>3</td>
</tr>
<tr>
<td>Presidio Trust</td>
<td>36, X</td>
</tr>
<tr>
<td>Prisons, Bureau of</td>
<td>26, V</td>
</tr>
<tr>
<td>Privacy and Civil Liberties Oversight Board</td>
<td>6, X</td>
</tr>
<tr>
<td>Procurement and Property Management, Office of</td>
<td>7, XXXII</td>
</tr>
<tr>
<td>Productivity, Technology and Innovation, Assistant Secretary</td>
<td>37, IV</td>
</tr>
<tr>
<td>Public Contracts, Department of Labor</td>
<td>41, 50</td>
</tr>
<tr>
<td>Public and Indian Housing, Office of Assistant Secretary for</td>
<td>24, IX</td>
</tr>
<tr>
<td>Public Health Service</td>
<td>42, I</td>
</tr>
<tr>
<td>Railroad Retirement Board</td>
<td>20, II</td>
</tr>
<tr>
<td>Reclamation, Bureau of</td>
<td>43, I</td>
</tr>
<tr>
<td>Refugee Resettlement, Office of</td>
<td>45, IV</td>
</tr>
<tr>
<td>Relocation Allowances</td>
<td>41, 302</td>
</tr>
<tr>
<td>Research and Innovative Technology Administration</td>
<td>49, XI</td>
</tr>
<tr>
<td>Rural Business-Cooperative Service</td>
<td>7, XVIII, XLII</td>
</tr>
<tr>
<td>Rural Development Administration</td>
<td>7, XLII</td>
</tr>
<tr>
<td>Rural Housing Service</td>
<td>7, XVIII, XXXV</td>
</tr>
<tr>
<td>Rural Telephone Bank</td>
<td>7, XVI</td>
</tr>
<tr>
<td>Rural Utilities Service</td>
<td>7, XVII, XVIII, XLII</td>
</tr>
<tr>
<td>Agency</td>
<td>CFR Title, Subtitle or Chapter</td>
</tr>
<tr>
<td>----------------------------------------------------------------------</td>
<td>-------------------------------</td>
</tr>
<tr>
<td>Safety and Environmental Enforcement, Bureau of</td>
<td>30, II</td>
</tr>
<tr>
<td>Saint Lawrence Seaway Development Corporation</td>
<td>33, IV</td>
</tr>
<tr>
<td>Science and Technology Policy, Office of</td>
<td>32, XXIV</td>
</tr>
<tr>
<td>Science and Technology Policy, Office of, and National Security Council</td>
<td>47, II</td>
</tr>
<tr>
<td>Secret Service</td>
<td>31, IV</td>
</tr>
<tr>
<td>Securities and Exchange Commission</td>
<td>5, XXXIV; 17, II</td>
</tr>
<tr>
<td>Selective Service System</td>
<td>32, XVI</td>
</tr>
<tr>
<td>Small Business Administration</td>
<td>2, XXVII; 13, I</td>
</tr>
<tr>
<td>Smithsonian Institution</td>
<td>36, V</td>
</tr>
<tr>
<td>Social Security Administration</td>
<td>2, XXIII; 30, III; 48, 23</td>
</tr>
<tr>
<td>Soldiers’ and Airmen’s Home, United States</td>
<td>5, XI</td>
</tr>
<tr>
<td>Special Counsel, Office of</td>
<td>5, VIII</td>
</tr>
<tr>
<td>Special Education and Rehabilitative Services, Office of</td>
<td>34, III</td>
</tr>
<tr>
<td>State Department</td>
<td>2, VI; 22, I; 28, XI</td>
</tr>
<tr>
<td>Federal Acquisition Regulation</td>
<td>48, 6</td>
</tr>
<tr>
<td>Surface Mining Reclamation and Enforcement, Office of</td>
<td>30, VII</td>
</tr>
<tr>
<td>Surface Transportation Board</td>
<td>49, X</td>
</tr>
<tr>
<td>Susquehanna River Basin Commission</td>
<td>16, VIII</td>
</tr>
<tr>
<td>Technology Administration</td>
<td>15, XI</td>
</tr>
<tr>
<td>Technology Policy, Assistant Secretary for</td>
<td>37, IV</td>
</tr>
<tr>
<td>Tennessee Valley Authority</td>
<td>5, I; 19, XIII; 18, XIII</td>
</tr>
<tr>
<td>Thrift Supervision Office, Department of the Treasury</td>
<td>12, V</td>
</tr>
<tr>
<td>Trade Representative, United States, Office of</td>
<td>15, XX</td>
</tr>
<tr>
<td>Transportation, Department of</td>
<td>2, XII; 5, L</td>
</tr>
<tr>
<td>Commercial Space Transportation</td>
<td>14, III</td>
</tr>
<tr>
<td>Contract Appeals, Board of</td>
<td>48, 63</td>
</tr>
<tr>
<td>Emergency Management and Assistance</td>
<td>44, IV</td>
</tr>
<tr>
<td>Federal Acquisition Regulation</td>
<td>48, 12</td>
</tr>
<tr>
<td>Federal Aviation Administration</td>
<td>14, I</td>
</tr>
<tr>
<td>Federal Highway Administration</td>
<td>23, I; 28, XI</td>
</tr>
<tr>
<td>Federal Motor Carrier Safety Administration</td>
<td>49, III</td>
</tr>
<tr>
<td>Federal Railroad Administration</td>
<td>49, II</td>
</tr>
<tr>
<td>Federal Transit Administration</td>
<td>49, VI</td>
</tr>
<tr>
<td>Maritime Administration</td>
<td>46, II</td>
</tr>
<tr>
<td>National Highway Traffic Safety Administration</td>
<td>23, II; III; 47, IV; 49, V</td>
</tr>
<tr>
<td>Pipeline and Hazardous Materials Safety Administration</td>
<td>49, I</td>
</tr>
<tr>
<td>Saint Lawrence Seaway Development Corporation</td>
<td>33, IV</td>
</tr>
<tr>
<td>Secretary of Transportation, Office of</td>
<td>14, II; 49, Subtitle A</td>
</tr>
<tr>
<td>Transportation Statistics Bureau</td>
<td>49, XI</td>
</tr>
<tr>
<td>Transportation, Office of</td>
<td>7, XXXIII</td>
</tr>
<tr>
<td>Transportation Security Administration</td>
<td>49, XII</td>
</tr>
<tr>
<td>Transportation Statistics Bureau</td>
<td>49, XI</td>
</tr>
<tr>
<td>Travel Allowances, Temporary Duty (TDY)</td>
<td>41, 301</td>
</tr>
<tr>
<td>Treasury Department</td>
<td>2, 5, XXI; 12, XV; 17, IV; 31, IX</td>
</tr>
<tr>
<td>Alcohol and Tobacco Tax and Trade Bureau</td>
<td>27, I</td>
</tr>
<tr>
<td>Community Development Financial Institutions Fund</td>
<td>12, XVIII</td>
</tr>
<tr>
<td>Comptroller of the Currency</td>
<td>12, I</td>
</tr>
<tr>
<td>Customs and Border Protection</td>
<td>19, I</td>
</tr>
<tr>
<td>Engraving and Printing, Bureau of</td>
<td>31, VI</td>
</tr>
<tr>
<td>Federal Acquisition Regulation</td>
<td>48, 10</td>
</tr>
<tr>
<td>Federal Claims Collection Standards</td>
<td>31, IX</td>
</tr>
<tr>
<td>Federal Law Enforcement-Training Center</td>
<td>31, VII</td>
</tr>
<tr>
<td>Financial Crimes Enforcement Network</td>
<td>31, X</td>
</tr>
<tr>
<td>Fiscal Service</td>
<td>31, II</td>
</tr>
<tr>
<td>Foreign Assets Control, Office of</td>
<td>31, V</td>
</tr>
<tr>
<td>Internal Revenue Service</td>
<td>26, I</td>
</tr>
<tr>
<td>Investment Security, Office of</td>
<td>31, VIII</td>
</tr>
<tr>
<td>Monetary Offices</td>
<td>31, I</td>
</tr>
<tr>
<td>Secret Service</td>
<td>31, IV</td>
</tr>
<tr>
<td>Secretary of the Treasury, Office of</td>
<td>31, Subtitle A</td>
</tr>
<tr>
<td>Thrift Supervision, Office of</td>
<td>12, V</td>
</tr>
<tr>
<td>Truman, Harry S. Scholarship Foundation</td>
<td>45, XVIII</td>
</tr>
<tr>
<td>United States and Canada, International Joint Commission</td>
<td>22, IV</td>
</tr>
<tr>
<td>United States and Mexico, International Boundary and Water Commission, United States Section</td>
<td>22, XI</td>
</tr>
<tr>
<td>Agency</td>
<td>CFR Title, Subtitle or Chapter</td>
</tr>
<tr>
<td>-----------------------------------------------------------------------</td>
<td>-------------------------------</td>
</tr>
<tr>
<td>U.S. Copyright Office</td>
<td>37, II</td>
</tr>
<tr>
<td>Utah Reclamation Mitigation and Conservation Commission</td>
<td>43, III</td>
</tr>
<tr>
<td>Veterans Affairs Department</td>
<td>2, VIII; 38, I</td>
</tr>
<tr>
<td>Federal Acquisition Regulation</td>
<td>48, 8</td>
</tr>
<tr>
<td>Veterans' Employment and Training Service, Office of the Assistant Secretary for</td>
<td>41, 61; 20, IX</td>
</tr>
<tr>
<td>Vice President of the United States, Office of</td>
<td>32, XXVIII</td>
</tr>
<tr>
<td>Wage and Hour Division</td>
<td>29, V</td>
</tr>
<tr>
<td>Water Resources Council</td>
<td>18, VI</td>
</tr>
<tr>
<td>Workers' Compensation Programs, Office of</td>
<td>20, I, VII</td>
</tr>
<tr>
<td>World Agricultural Outlook Board</td>
<td>7, XXXVIII</td>
</tr>
</tbody>
</table>
List of CFR Sections Affected

All changes in this volume of the Code of Federal Regulations (CFR) that were made by documents published in the Federal Register since January 1, 2011 are enumerated in the following list. Entries indicate the nature of the changes effected. Page numbers refer to Federal Register pages. The user should consult the entries for chapters, parts and subparts as well as sections for revisions.


2011

<table>
<thead>
<tr>
<th>CFR</th>
<th>Page</th>
<th>76 FR</th>
</tr>
</thead>
</table>
| Chapter I | 63.6603  | (a) revised | 12806
|           | 63.6625  | (b) revised; (k) removed | 12806
|           | 63.6635  | (b) and (c) revised | 12807
|           | 63.6675  | Amended | 12807
| Subpart ZZZZ | 63.6675 | revised | 12807
| Table 1b and 5 revised; Table 2b amended | 12807
| Table 6 revised | 12870
| Subpart DDDDD | 63.7480 | Revised | 15664
| Revisied | 15664
| Regulation at 76 FR 15664 eff. | 15664
| date delayed indefinitely | 28664

2012

(No regulations published)

2013

<table>
<thead>
<tr>
<th>CFR</th>
<th>Page</th>
<th>76 FR</th>
</tr>
</thead>
</table>
| Chapter I | 63.6580  | (f) added | 6700
|           | 63.6590  | (b)(1)(i) and (3)(iii) revised; (b)(3)(v), (vii) and (viii) removed | 6700
|           | 63.6595  | (a)(1) revised | 6701
|           | 63.6602  | Revised | 6701
|           | 63.6603  | Heading, (a) and (b) revised; (c) through (f) added | 6701
|           | 63.6604  | Revised | 6702
|           | 63.6605  | (a) revised | 6702

40 CFR—Continued

<table>
<thead>
<tr>
<th>CFR</th>
<th>Page</th>
<th>76 FR</th>
</tr>
</thead>
</table>
| Chapter I | 63.6620  | (b), (d) and (e) revised | 6702
|           | 63.6625  | (a) introductory text, (b)(1)(iv), (e)(6), (g), (i) and (j) revised; (b) introductory text amended | 6703
|           | 63.6630  | Heading and (a) revised; (d) and (e) added | 6704
|           | 63.6640  | Heading, (a) and (f) revised; (c) added | 6704
|           | 63.6645  | (i) added | 6705
|           | 63.6650  | (b) added | 6705
|           | 63.6655  | (f) introductory text revised | 6706
|           | 63.6675  | Amended | 6706
| Subpart ZZZZ | 63.6675 | (Subpart ZZZZ) | 6706
| Table 1b revised | 6706
| Table 2b revised | 6707
| Table 3b revised | 6708
| Table 4b corrected | 6708
| Table 5b revised | 6709
| Table 6b revised | 6710
| Table 7b revised | 6711
| Table 8b revised | 6712
| Table 9b revised | 6713
| Table 10b revised | 6714
| Table 11b revised | 6715
| Table 12b revised | 6716
| Table 13b revised | 6717
| Table 14b revised | 6718
| Table 15b revised | 6719
| Table 16b revised | 6720
| Appendix A added | 6721
| Revised | 6712
| (e) added | 6712
| (f) added | 6712
| (g) added | 7162
| (h), (i), (m) and (n) revised | 7162
| (a) and (b) revised; (e), (f) added | 7162

519
40 CFR (7–1–16 Edition)

40 CFR—Continued

Chapter I—Continued

63.7499 (d) and (f) through (l) revised; (p) through (u) added........7163
63.7500 (a) and (c) revised; (d), (e) and (f) added.......................7163
63.7501 Revised........................................................................7163
63.7505 (a), (c), (d) introductory text, (1) introductory text and (ii) revised.................................................................7164
63.7510 Revised........................................................................7164
63.7515 Revised........................................................................7165
63.7520 (a), (c), (d) and (e) revised; (f) added.....................................7166
63.7521 Revised........................................................................7167
63.7522 (a) through (d), (e)(1), (2), (f) introductory text, (1), (2), (g) introductory text, (2)(i), (iv), (vi); (B), (3) introductory text, (4) introductory text, (ii), (h), (i), (j)(1) and (k) revised................7168
63.7525 (a), (b), (c) introductory text, (d) introductory text, (1) through (4), (e)(2), (3), (f)(2), (j) and (k) revised; (l) and (m) added.................................................................7171
63.7530 (b)(3) redesignated as (b)(4); (a), (b) introductory text, new (4), (c) introductory text, (2), (3), (4), (d), (e), (g) and (h) revised; new (b)(3), (c)(5) and (f) added.................................................................7174
63.7533 Heading, (a), (b)(1), (4), (c) introductory text, (1)(i), (ii), (2)(i), (3), (d), (e) and (f) revised; (g) added........................7178
63.7535 Heading, (b), (c) and (d) revised.......................................7179
63.7540 Revised........................................................................7179
63.7541 (a)(3) and (4) revised.............................................................7182
63.7545 (a), (b), (c), (e) introductory text, (1), (2), (3), (4), (5) introductory text, (1)(i), (ii), (iii), (f) introductory text, (g)(1), (2), (h) introductory text, (1) and (3) revised; (e)(5)(ii) added; (h)(4) removed.................................7183
63.7550 Revised........................................................................7183
63.7555 (d) introductory text, (2) through (6), (f), (g) and (h) revised; (d)(9), (10), (11), (l) and (j) added.................................................................7185
63.7560 (a) and (b) introductory text revised......................................7186
63.7575 Amended........................................................................7187
63.7498—63.7575 (Subpart DDDDD)
Table 1 revised.................................7193
Table 2 revised.................................7195
Table 3 revised.................................7198
Table 4 revised.................................7199
Table 5 amended..............................7200
Table 6 revised.................................7201
Table 7 amended..............................7203
Table 8 revised.................................7204
Table 9 amended..............................7205
Table 10 amended.............................7205
Table 11 added.................................7206
Table 12 added.................................7208
Table 13 added.................................7210
Regulation at 76 FR 15664 eff. date delay lifted......................7161

2014

40 CFR

Chapter I

63.6580—63.6675 (Subpart ZZZZ)
Table 4 revised.................................11290

2015

40 CFR

Chapter I

63.7491 (a), (j) and (l) revised; (n) added.................................72806
63.7495 (a), (e) and (f) revised; (h) and (l) added........................72807
63.7500 (a)(1) introductory text, (ii), (ii) and (f) revised..............72807
63.7501 Removed..................................................72807
63.7505 (a) introductory text, (ii), (iii) and (f) revised..............72807
63.7510 (a) introductory text, (2)(ii), (c), (e), (g) and (i) revised; (k) added.................................................................72808
63.7515 (d), (e) and (h) revised.............................................72808
63.7521 (a), (c) introductory text, (1)(ii), (f) introductory text, (g) introductory text, (2)(ii), (vi) and (h) revised................72808
63.7522 (c), (d), (f)(1) introductory text, (g)(1), (3) introductory text and (l) revised; (j)(1) amended.................................72809
63.7525 (a) introductory text, (1), (2) introductory text, (3), (5), (b) introductory text, (1) introductory text, (iii), (g)(3), (4), (m) introductory text and (2) revised; (a)(2)(vi) added..................72810
### List of CFR Sections Affected

<table>
<thead>
<tr>
<th>40 CFR—Continued</th>
<th>80 FR Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chapter I—Continued</td>
<td></td>
</tr>
<tr>
<td>63.7530 (a), (b) introductory text, (4)(ii)(F), (e), (h) and (i)(3) revised; (b)(1)(iii), (2)(iii), (3)(iii), (4)(ii)(D), (c)(3), (d) and (5) amended; (b)(4)(iii) through (viii) redesignated as (b)(4)(iv) through (ix); new (b)(4)(iii) added; (d) removed....................</td>
<td>72811</td>
</tr>
<tr>
<td>63.7533 (e) revised..........................</td>
<td>72812</td>
</tr>
<tr>
<td>63.7535 (c) and (d) revised...............</td>
<td>72812</td>
</tr>
<tr>
<td>63.7540 (a)(2), (3) introductory text, (iii), (5) introductory text, (iii), (8)(ii), (10) introductory text, (i), (vi) introductory text, (12), (14)(i), (15)(i), (17) introductory text, (iii), (18)(i), (19)(iii) and (d) revised...............</td>
<td>72813</td>
</tr>
<tr>
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<td>63.7555 (d)(3), (1) and (j) removed; (d)(4) through (11) redesignated as new (d)(3) through (10); new (d)(3), (4) and (b) revised; (a)(3), new (d)(11), (12) and (13) added..................</td>
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<th>40 CFR—Continued</th>
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<tr>
<td>Chapter I—Continued</td>
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<tr>
<td>63.7570 (b) revised.........................</td>
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<tr>
<td>63.7575 Amended.............................</td>
<td>72817</td>
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<td>63.7480—63.7575 (Subpart DDDD)</td>
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<td>Table 1 amended .......................</td>
<td>72819</td>
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<td>Table 2 amended.........................</td>
<td>72821</td>
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<td>Table 3 amended..........................</td>
<td>72823</td>
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<td>Table 4 revised .........................</td>
<td>72824</td>
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<tr>
<td>Table 5 amended; Table 6 revised ..........</td>
<td>72825</td>
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<td>Table 7 revised .........................</td>
<td>72827</td>
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<td>Table 8 amended.........................</td>
<td>72829</td>
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<td>Tables 9 and 10 amended ..................</td>
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<td>Table 11 revised.........................</td>
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<td>Table 13 amended.........................</td>
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<td>63.8380—63.8515 (Subpart JJJJJ) Revised ..................</td>
<td>65520</td>
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<td>63.8530—63.8665 (Subpart KKKKK) Revised ..................</td>
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<td>63.8805 (c) correctly amended ...........</td>
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### 2016

(No regulations published)