June 23, 2023

MEMORANDUM

TO: Docket ID: EPA-HQ-OAR-2020-0430

FROM: Tonisha Dawson, Environmental Engineer, U.S. EPA

SUBJECT: Proposed Regulation Edits for 40 CFR Part 63, Subpart QQQ: Primary Copper Smelting NESHAP Risk and Technology Review Supplemental Proposal

This memorandum provides the proposed regulation edits associated with a supplemental notice of proposed rulemaking titled, *"National Emission Standards for Hazardous Air Pollutants: Primary Copper Smelting Risk and Technology Review."* Attachment 1 to this memorandum, for the convenience of interested parties, presents the subject subparts of the CFR including proposed regulation edits shown in redline/strikeout format. The presented edits include those from the 2022 proposed RTR[1] and the additional amendments proposed in this supplemental rulemaking.

As described in the preamble to the supplemental proposal, we are co-proposing two options for the control of filterable particulate emissions as a surrogate for metal HAP from secondary capture systems on copper converter departments and anode refining departments. These options are:

Option 1: A wet electrostatic precipitator to control the combined emissions stream from secondary capture systems on copper converter department and the anode refining department.

Option 2: A baghouse to control the emissions from the secondary capture systems on copper converter departments.

In this redline document, we show the amendments for either option. Option 1 is highlighted in yellow and preceded with the text "OPTION 1"; and option 2 is highlighted green and preceded by the text "OPTION 2." Affected paragraphs include:

- Compliance date: §63.1443(a)(3);
- Emission limit[2]: §63.1444(n); §63.1444(d)(6) and (7)
- Emission limit alternative: §63.1446 only applies to Option 2 since Option 1 is already a combined emission limit;

Under either option, facilities will conduct performance tests according to §63.1450(a), demonstrate initial compliance with §63.1451(a), and demonstrate continuous compliance with §63.1453(a). All recordkeeping and reporting requirements under either option are also the same.

Attachment 1: Regulatory text with proposed edits in redline/strikeout.

[1] 87 FR 1616; January 11, 2022

[2] Separately, the emission limit for the anode refining department in §63.1444(d) will apply under Option 2 but will be superseded under Option 1 since that is combined limit for both streams.

Attachment 1
Regulatory text with proposed edits in redline/strikeout

Subpart QQQ – National Emission Standards for Hazardous Air Pollutants for Primary Copper Smelting

§63.1440 What is the purpose of this subpart?

This subpart establishes national emission standards for hazardous air pollutants (NESHAP) for primary copper smelters. 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.

§63.1441 Am I subject to this subpart?

You are subject to this subpart if you own or operate a primary copper smelter that is (or is part of) a major source of hazardous air pollutant (HAP) emissions on the first compliance date that applies to you~~, and your primary copper smelter uses batch copper converters as defined in §63.1459~~. Your primary copper smelter is a major source of HAP if it emits or has the potential to emit any single HAP at the rate of 10 tons or more per year or any combination of HAP at a rate of 25 tons or more per year.

§63.1442 What parts of my plant does this subpart cover?

(a) This subpart applies to each new and existing affected source at your primary copper smelter. The affected sources are each copper concentrate dryer, each smelting ~~furnace~~vessel, each slag cleaning vessel, each copper converter department, each anode refining department, process fugitive emission sources (*i.e.*, roof vents) from smelting vessels/furnaces, converters and anode refining operations, and the entire group of fugitive ~~emission~~ dust sources, as defined in §63.1459.

(b) An affected source at your primary copper smelter is existing if you commenced construction or reconstruction of the affected source before April 20, 1998.

(c) An affected source at your primary copper smelter is new if you commenced construction or reconstruction of the affected source on or after April 20, 1998. An affected source is reconstructed if it meets the definition of "reconstruction" in §63.2.

§63.1443 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 June 13, 2005 except as specified in paragraphs (a)(1) and (2).

(1) For existing anode refining furnaces, smelting building roof vents, converter department roof vents, and anode refining department roof vents, 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 **[INSERT DATE 2 YEARS AFTER DATE OF PUBLICATION OF THE FINAL RULE IN THE FEDERAL REGISTER]**.

(2) For existing copper concentrate dryers, converting department, the anode refining department, and the smelting vessels, you must comply with the mercury, benzene, toluene, chlorine, hydrogen chloride, polycyclic aromatic hydrocarbons excluding naphthalene, naphthalene, and dioxins/furans emission limitations specified in §63.1444 paragraphs (~~i~~j) and (m) no later than **[INSERT DATE ~~3~~1 YEAR~~S~~ AFTER DATE OF PUBLICATION OF THE FINAL RULE IN THE FEDERAL REGISTER]**.

(3) OPTION 1: For existing secondary capture systems on copper converter departments and anode refining departments, you must comply with the emission limitation specified in §63.1444 paragraph (n), work practice standard, and operation and maintenance requirement in this subpart that applies to you no later than **[INSERT DATE 2 YEARS AFTER DATE OF PUBLICATION OF THE FINAL RULE IN THE FEDERAL REGISTER]**.

OPTION 2: For existing secondary capture systems on copper converter departments, you must comply with the emission limitation specified in §63.1444 paragraph (d)(6), work practice standard, and operation and maintenance requirement in this subpart that applies to you no later than **[INSERT DATE 2 YEARS AFTER DATE OF PUBLICATION OF THE FINAL RULE IN THE FEDERAL REGISTER].**

(b) If you have a new affected source and its initial startup date is on or before June 12, 2002, you must comply with each emission limitation, work practice standard, and operation and maintenance requirement in this subpart that applies to you by June 12, 2002.

(c) If you have a new affected source and its initial startup date is after June 12, 2002, 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 primary copper smelter is an area source that becomes a major source of HAP, the compliance dates listed in paragraphs (d)(1) and (2) of this section apply to you.

(1) Any portion of the existing primary copper smelter that is a new affected source or a new reconstructed source must be in compliance with this subpart upon startup.

(2) All other parts of the primary copper smelter must be in compliance with this subpart no later than 3 years after it becomes a major source.

(e) You must meet the notification and schedule requirements in §63.1454. Several of these notifications must be submitted before the compliance date for your affected source.

§63.1444 What emissions limitations and work practice standards must I meet for my copper concentrate dryers, smelting ~~furnaces~~vessels, slag cleaning vessels, ~~and~~ copper converter departments~~, and~~and- anode refining departments?~~?~~

(a) *Copper concentrate dryers.* For each copper concentrate dryer, you must comply with the emission limitation in paragraph (a)(1) or (2) of this section that applies to you.

(1) For each existing copper concentrate dryer, you must not cause to be discharged to the atmosphere from the dryer vent any gases that contain ~~total~~filterable particulate matter in excess of 50 milligrams per dry standard cubic meter (mg/dscm) as measured using the test methods specified in §63.1450(a).

(2) For each new copper concentrate dryer, you must not cause to be discharged to the atmosphere from the dryer vent any gases that contain ~~total~~filterable particulate matter in excess of 23 mg/dscm as measured using the test methods specified in §63.1450(a).

(b) *Smelting ~~furnaces~~vessels.* For each smelting ~~furnace~~vessel, you must comply with the emission limitations and work practice standards in paragraphs (b)(1) and (2) of this section.

(1) For each smelting ~~furnace~~vessel, you must not cause to be discharged to the atmosphere any process off-gas that contains nonsulfuric acid particulate matter in excess of 6.2 mg/dscm as measured using the test methods specified in §63.1450(b). Process off-gas from a smelting ~~furnace~~ vessel is generated when copper ore concentrates and fluxes are being smelted to form molten copper matte and slag layers.

(2) For each smelting ~~furnace~~vessel, you must control the process fugitive emissions released when tapping copper matte or slag from the smelting ~~furnace~~ vessel according to paragraphs (b)(2)(i) and (ii) of this section.

(i) At all times when copper matte or slag is tapped from the smelting ~~furnace~~vessel, you must operate a capture system that collects the gases and fumes released from the tapping port in use. The design and placement of this capture system must be such that the tapping port opening, launder, and receiving vessel (*e.g.*, ladle, slag pot) are positioned within the confines or influence of the capture system's ventilation draft during those times when the copper matte or slag is flowing from the tapping port opening.

(ii) You must not cause to be discharged to the atmosphere from the capture system used to comply with paragraph (b)(2)(i) of this section any gases that contain ~~total~~filterable particulate matter in excess of 23 mg/dscm as measured using the test methods specified in §63.1450(a).

~~(iii) You must not discharge to the atmosphere process fugitive gases from the smelter building roofline vents containing filterable particulate matter emissions in excess of 4.3 lbs/hr as measured using the test methods specified in §63.1450(a)e).~~

(c) *Slag cleaning vessels.* For each slag cleaning vessel, you must comply with the emission limitations and work practice standards in paragraphs (c)(1) through (3) of this section that apply to you.

(1) For each slag cleaning vessel, except as provided for in paragraph (c)(2) of this section, you must not cause to be discharged to the atmosphere any process off-gas that contains nonsulfuric acid particulate matter in excess of 6.2 mg/dscm as measured using the test methods specified in §63.1450(b).

(2) As an alternative to complying with the emission limit for nonsulfuric acid particulate matter in paragraph (c)(1) of this section, for each existing slag cleaning vessel you may choose

to comply with the emission limit for ~~total~~filterable particulate matter specified in this paragraph (c)(2). You must not cause to be discharged to the atmosphere any process off-gas that contains ~~total~~filterable particulate matter in excess of 46 mg/dscm as measured using the test methods specified in §63.1450(a).

(3) For each slag cleaning vessel, you must control process fugitive emissions released when tapping copper matte or slag from the slag cleaning vessel according to paragraphs (c)(3)(i) and (ii) of this section.

(i) At all times when copper matte or slag is tapped from the slag cleaning vessel, you must operate a capture system that collects the gases and fumes released from the tapping port in use. The design and placement of this capture system must be such that the tapping port opening, launder, and receiving vessel (*e.g.*, ladle, slag pot) are positioned within the confines or influence of the capture system's ventilation draft during those times when the copper matte or slag is flowing from the tapping port opening.

(ii) You must not cause to be discharged to the atmosphere from the capture system used to comply with paragraph (c)(3)(i) of this section any gases that contain ~~total~~filterable particulate matter in excess of 23 mg/dscm as measured using the test methods specified in §63.1450(a).

(d) *Existing copper converter departments.* For each existing copper converter department, you must comply with the emission limitations and work practice standards in paragraphs (d)(1) through (~~7~~6~~6~~) of this section that apply to you.

(1) You must operate a capture system that collects the process off gas vented from each batch copper converter. At all times when one or more batch copper converters are blowing, you must operate the capture system according to the written operation and maintenance plan that has been prepared according to the requirements in §63.1447(b).

(2) If your copper converter department uses P~~i~~eirce-Smith converters, the capture system design must include use of a primary hood that covers the entire mouth of the converter vessel when the copper converter is positioned for blowing. Additional hoods (*e.g.*, secondary hoods) or other capture devices must be included in the capture system design as needed to achieve the opacity limit in paragraph (d)(4) of this section. The capture system design may use multiple intake and duct segments through which the ventilation rates are controlled independently of each other, and individual duct segments may be connected to separate control devices.

(3) If your copper converter department uses Hoboken converters, the capture system must collect all process off-gas vented during blowing through the side-flue intake on each converter vessel.

(4) You must operate the capture system such that any visible emissions exiting the roof monitors or roof exhaust fans on the building housing the copper converter department meet the opacity limit as specified in paragraphs (d)(4)(i) ~~and~~ through (ii~~i~~) of this section.

(i) The opacity of any visible emissions exiting the roof monitor-s or roof exhaust fans on the building housing the copper converter department must not exceed 4 percent as determined by a performance test conducted according to §63.1450(c).

(ii) The opacity limit in paragraph (d)(4)(i) of this section applies only at those times when a performance test is conducted according to §63.1450(c). The requirements for compliance with opacity and visible emission standards specified in §63.6(h) do not apply to this opacity limit.

(5) You must not cause to be discharged to the atmosphere from any P~~i~~eirce-Smith converter primary hood capture system or Hoboken converter side-flue intake capture system

any process off-gas that contains nonsulfuric acid particulate matter in excess of 6.2 mg/dscm as measured using the test methods specified in §63.1450(b).

(6) OPTION 2: Before **[INSERT DATE 2 YEARS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]**, ~~You~~ you must not cause to be discharged to the atmosphere from any secondary capture system any gases that contain ~~total~~filterable particulate matter in excess of 23 mg/dscm as measured using the test methods specified in §63.1450(a). On or after **[INSERT DATE 2 YEARS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]**, you must not cause to be discharged to the atmosphere from any secondary capture system any gases that contain filterable particulate matter in excess of 2.43 mg/dscm as measured using the test methods specified in §63.1450(a).

(7) OPTION 2: On or after **[INSERT DATE 2 YEARS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]**,you must operate a capture system that collects the gases and fumes released from converting vessels and conveys the collected gas stream to a control device.

~~(7) You must not cause to be discharged to the atmosphere process fugitive gases from the converter department roofline vents containing filterable particulate matter emissions in excess of 1.7 lbs/hr as measured using the test methods specified in §63.1450(a)e).~~

(e) *New copper converter departments.* For each new copper converter department for which construction commenced on or after April 20, 1998, the use of batch copper converters is prohibited. For each new copper converter department which will contain a copper converter other than a batch converter (such as a continuous converter), you must meet the requirements in paragraphs (e)(1) and (~~3~~2).

(1) You must not cause to be discharged to the atmosphere from any combination of stacks or other vents any captured process off-gas that contains filterable particulate matter greater than a daily (24-hour) average of 0.031 pounds of particulate matter per ton of copper concentrate feed charged to the smelting vessel as measured using the test methods specified in §63.1450(a).

(2) You must operate a capture system that collects the gases and fumes released from converting vessels and conveys the collected gas stream to a control device.

~~(3) You must not cause to be discharged to the atmosphere process fugitive gases from the converter department roofline vents containing filterable particulate matter emissions in excess of 1.7 lbs/hr as measured using the test methods specified in §63.1450(f).~~

(f) *Baghouses.* For each baghouse applied to meet any ~~total~~filterable particulate matter emission limit in paragraphs (a) through (d) of this section, you must operate the baghouse such that the bag leak detection system does not alarm for more than 5 percent of the total operating time in any semiannual reporting period.

(g) *Venturi wet scrubbers.* For each venturi wet scrubber applied to meet any ~~total~~filterable particulate matter emission limit in paragraphs (a) through (d) of this section, you must maintain the hourly average pressure drop and scrubber water flow rate at or above the minimum levels established during the initial or subsequent performance test.

(h) *Other control devices.* For each control device other than a baghouse or venturi wet scrubber applied to meet any ~~total~~filterable particulate matter emission limit in paragraphs (a) through (d) of this section, you must operate the control device as specified in paragraphs (h)(1) and (2) of this section.

(1) You must select one or more operating parameters, as appropriate for the control device design, that can be used as representative and reliable indicators of the control device operation.

(2) You must maintain the hourly average value for each of the selected parameters at or above the minimum level or at or below the maximum level, as appropriate for the selected parameter, established during the initial or subsequent performance test.

(i) *New and existing anode refining departments.* For each anode refining department, you must comply with the emission limitation in paragraph (i)(1) ~~through~~and (~~3~~2) of this section.

(1) For each new and existing anode refining department, you must not discharge to the atmosphere captured process exhaust gases from the anode refining furnaces containing filterable particulate matter emissions in excess of 5.78 mg/dscm as measured using the test methods specified in §63.1450(a).

(2) You must operate a capture system that collects the process off-gases and fumes released from anode refining department and conveys the collected gas stream to a control device.

~~(3) You must not discharge to the atmosphere process fugitive gases from the anode refining department roofline vents containing filterable particulate matter emissions in excess of 1.6 lbs/hr as measured using the test methods specified in §63.1450(a)e).~~

(j) *Existing source mercury emissions.* You must not discharge exhaust gases to the atmosphere through any combination of stacks or other vents from the copper concentrate dryers, converting department, the anode refining department, and the smelting vessels containing mercury emissions in excess of ~~0.00433100~~0.033 lbs/hr for existing sources as measured by the test methods in §63.1450(d).

(k) *New source mercury emissions.* You must not discharge exhaust gases to the atmosphere through any combination of stacks or other vents from the copper concentrate dryers, converting department, the anode refining department, and the smelting vessels containing mercury emissions in excess of 0.00097 lbs/hr for existing sources as measured by the test methods in §63.1450(d).

(l) New and ~~E~~*existing sources of process fugitive gases from the roofline vents of the smelter building, the converter department, and the anode refining department.* You must not discharge to the atmosphere process fugitive gases from the combination of roofline vents from the smelter building, the converter department and the anode refining department containing filterable particulate matter emissions in excess of -6.3 lbs/hr as measured using the test methods specified in §63.1450(e).

(m) *New and existing sources of benzene, toluene, chlorine, hydrogen chloride, polycyclic aromatic hydrocarbons excluding naphthalene, naphthalene, and dioxins/furans emissions.* You must not discharge exhaust gases to the atmosphere through any combination of stacks or other vents from the copper concentrate dryers, converting department, the anode refining department, and the smelting vessels in excess the emission limits in Table 2 of this subpart as measured by the test methods in §63.1450(f).

(n) OPTION 1: *New and existing secondary capture system for the converter department and the point source emissions from the anode refining department*. For each new and existing secondary capture system for the converter department and anode refining department, you must comply with the emission limitation in paragraph (n)(1) and (2) of this section.

(1) OPTION 1: You must not cause to be discharged to the atmosphere from the secondary capture system for the converter department and the anode refining department any

gases that contain filterable particulate matter emissions in excess of 0.374 mg/dscm as measured using the test methods specified in §63.1450(a).

(2) OPTION 1: You must operate a capture system that collects the process off-gases and fumes released from the combined secondary capture system for the converter department and the anode refining department and conveys the collected gas stream to a control device.

§63.1445 What work practice standards must I meet for my fugitive dust sources?

(a) You must control particulate matter emissions from fugitive dust sources at your primary copper smelter by operating according to a written fugitive dust control plan that has been approved by the ~~designated~~ Administrator or delegated permitting authority ~~authority~~. For the purpose of complying with this paragraph (a) you may use an existing fugitive dust control plan provided that the plan complies with the requirements of this section. A fugitive dust control plan is considered to be approved if the plan has been incorporated in your applicable State implementation plan, and the document addresses the fugitive dust sources specified in paragraph (b) of this section and includes the information specified in paragraph (c) of this section.

(b) Your fugitive dust control plan must address each of the fugitive dust emission sources listed in paragraphs (b)(1) through (~~6~~7) of this section that are located at your primary copper smelter.

(1) On-site roadways used by trucks or other motor vehicles (*e.g.*, front-end loaders) when transporting bulk quantities of fugitive dust materials. Paved roads and parking areas that are not used by these vehicles do not need to be included in the plan (*e.g.*, employee and visitor parking lots).

(i) You must conduct routine cleaning of paved roads with a -sweeper, vacuum or wet broom (in accordance with applicable recommendations by the manufacturer of the street sweeper, vacuum, or wet broom), with such cleaning to occur no less frequently than on a daily basis unless the roads have sufficient surface moisture such that fugitive dust is not generated.

(ii) Chemical dust suppressants will be applied not less frequently than once per month at slag haul roads and not less frequently than every 6 weeks on all other unpaved roads unless the roads have sufficient surface moisture such that fugitive dust is not generated.

(2) Unloading of fugitive dust materials from trucks or railcars.

(3) Outdoor piles used for storage of fugitive dust materials.

(4) Bedding areas used for blending copper concentrate and other feed constituents.

(5) Each transfer point in conveying systems used to transport fugitive dust materials. These points include, but are not limited to, transfer of material from one conveyor belt to another and transfer of material to a hopper or bin.

(6) Other site-specific sources of fugitive dust emissions that the Administrator or delegated permitting authority designate to be included in your fugitive dust control plan.

(7) The cargo compartment of all trucks or other motor vehicles (*e.g.*, front-end loaders) when transporting bulk quantities of fugitive dust materials must be maintained to ensure:

(i) The floor, sides, and/or tailgate(s) are free of holes or other openings

(ii) All loads of trucks containing copper concentrate arriving at the facility are covered with a tarp to prevent spills and fugitive emissions

(iii) Trucks are loaded only to such a level as to prevent spillage over the side

(iv) A speed limit of 15 mph is required

(v) All dust producing material internally transferred or moved by truck at the facility is covered with a tarp to prevent spills and fugitive emissions.

(c) Your fugitive dust control plan must describe the control measures you use to control fugitive dust emissions from each source addressed in the plan, as applicable and appropriate for your site conditions. Examples of control measures include, but are not limited to, locating the source inside a building or other enclosure, installing and operating a local hood capture system over the source and venting the captured gas stream to a control device, placing material stockpiles below grade, installing wind screens or wind fences around the source, spraying water on the source as weather conditions require, applying appropriate dust suppression agents on the source, or combinations of these control measures.

(d) The requirement for you to operate according to a written fugitive dust control plan must be incorporated in your operating permit that is issued by the ~~designated~~ delegated permitting authority under part 70 of this chapter. A copy of your fugitive dust control plan must be sent to the ~~designated~~ delegated permitting authority on or before the compliance date for your primary copper smelter, as specified in §63.1443.

(e) The fugitive dust control plan must be reviewed, updated (if necessary), and then approved by the delegated authority every five years.

§63.1446 What alternative emission limitation may I meet for my combined gas streams?

(a) For situations where you combine gas streams from two or more affected sources for discharge to the atmosphere through a single vent, you may choose to meet the requirements in paragraph (b) of this section as an alternative to complying with the individual ~~total~~filterable particulate matter emission limits specified in §63.1444 that apply to you. This alternative

emission limit for a combined gas stream may be used for any combination of the affected source gas steams specified in paragraphs (a)(1) through (6~~5~~) of this section.

(1) Gas stream discharged from a copper concentrate dryer vent that would otherwise be subject to §63.1444(a)(1) or (2);

(2) Gas stream discharged from a smelting ~~furnace~~ vessel capture system that would otherwise be subject to §63.1444(b)(2)(ii);

(3) Process off-gas stream discharged from a slag cleaning vessel that would otherwise be subject to §63.1444(c)(2);

(4) Gas stream discharged from a slag cleaning vessel capture system that would otherwise be subject to §63.1444(c)(3)(ii); and

(5) Gas stream discharged from ~~a batch~~ existing batch copper converter secondary capture system that would otherwise be subject to §63.1444(d)(5).

(6) Gas stream discharged from anode refining departments that would otherwise be subject to §63.1444(i)(1).

(b) You must meet the requirements specified in paragraphs (b)(1) and (2) of this section for the combined gas stream discharged through a single vent.

(1) For each combined gas stream discharged through a single vent, you must not cause to be discharged to the atmosphere any gases that contain ~~total~~filterable particulate matter in excess of the emission limit calculated using the procedure in paragraph (b)(2) of this section and measured using the test methods specified in §63.1450(a).

(2) You must calculate the alternative ~~total~~filterable particulate matter emission limit for your combined gas stream using Equation 1 of this section. The volumetric flow rate value for each of the individual affected source gas streams that you use for Equation 1 (*i.e.*, the flow rate

of the gas stream discharged from the affected source but before this gas stream is combined with the other gas streams) is to be the average of the volumetric flow rates measured using the test method specified in §63.1450(a)(1)(ii):

$$E_{Alt} = \frac{E_d Q_d + E_{sv} Q_{sv} + E_{scvp} Q_{scvp} + E_{scvf} Q_{scvf} + E_{cc} Q_{cc} + E_{ard} Q_{ard}}{Q_d + Q_{sv} + Q_{scvp} + Q_{scvf} + Q_{cc} + Q_{ard}} \quad (Eq. 1)$$

Where

E_{Alt} = Alternative ~~total~~filterable particulate matter emission limit for the combined gas stream discharged to atmosphere through a single vent (mg/dscm);

E_d = ~~Total~~Filterable particulate matter emission limit applicable to copper concentrate dryer as specified in §63.1444(a)(1) or (2) (mg/dscm);

Q_d = Copper concentrate dryer exhaust gas stream ~~volumetric flow rate~~sample volume before being combined with other gas streams (dscm);

E_{sv} = ~~Total~~Filterable particulate matter emission limit for smelting ~~furnace~~ vessel capture system as specified in §63.1444(b)(2)(ii) (mg/dscm);

Q_{sv} = Smelting ~~furnace~~ vessel capture system exhaust gas stream ~~volumetric flow rate~~sample volume before being combined with other gas streams (dscm);

E_{scvp} = ~~Total~~Filterable particulate matter emission limit for slag cleaning vessel process off-gas as specified in §63.1444(c)(2) (mg/dscm);

Q_{scvp} = Slag cleaning vessel process off-gas ~~volumetric flow rate~~sample volume before being combined with other gas streams (dscm);

E_{scvf} = ~~Total~~Filterable particulate matter emission limit for slag cleaning vessel capture system as specified in §63.1444(c)(3)(ii) (mg/dscm);

Q_{scvf} = Slag cleaning vessel capture system exhaust gas stream ~~volumetric flow rate~~sample volume before being combined with other gas streams (dscm);

E_{cc} = ~~Total~~Filterable particulate emission limit for the existing batch copper converter secondary capture system as specified in §63.14~~5~~44(d)(~~5~~6) (mg/dscm); and

Q_{cc} = Batch copper converter capture system exhaust gas stream ~~volumetric flow rate~~sample volume before being combined with other gas streams (dscm).

E_{ard} = Filterable particulate matter emission limit for the anode refining department as specified in §63.1444(i)(1).

Q_{ard} = Anode refining department exhaust gas stream sample volume before being combined with other gas streams (dscm).

(c) For each baghouse applied to meet any ~~total~~filterable particulate matter emission limit in paragraph (b) of this section, you must operate the baghouse such that the bag leak detection system does not alarm for more than 5 percent of the total operating time in any semiannual reporting period.

(d) For each venturi wet scrubber applied to meet any ~~total~~filterable particulate matter emission limit in paragraph (b) of this section, you must maintain the hourly average pressure drop and scrubber water flow rate at or above the minimum levels established during the initial or subsequent performance test.

(e) For each control device other than a baghouse or venturi wet scrubber applied to meet any ~~total~~filterable particulate matter emission limit in paragraph (b) of this section, you must operate the control device as specified in paragraphs (e)(1) and (2) of this section.

(1) You must select one or more operating parameters, as appropriate for the control device design, that can be used as representative and reliable indicators of the control device operation.

(2) You must maintain the hourly average value for each of the selected parameters at or above the minimum level or at or below the maximum level, as appropriate for the selected parameter, established during the initial or subsequent performance test.

§63.1447 What are my operation and maintenance requirements?

(a) Before **[INSERT DATE 180 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]**, ~~As~~ 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. On or after **[INSERT DATE 180 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]**, at all times, including periods of startup, shutdown, and malfunction, you must to the extent practicable, maintain and operate any affected source, including associated air pollution control equipment, in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the permitting authority which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.

(b) You must prepare and operate at all times according to a written operation and maintenance plan for each capture system and control device subject to standards in §63.1444 or §63.1446. The plan must address the requirements in paragraphs (b)(1) through (3) of this section as applicable to the capture system or control device.

(1) *Preventative maintenance.* You must perform preventative maintenance for each capture system and control device according to written procedures specified in your operation

and maintenance plan. The procedures must include a preventative maintenance schedule that is consistent with the manufacturer's instructions for routine and long-term maintenance.

(2) *Capture system inspections.* You must conduct monthly inspections of the equipment components of the capture system that can affect the performance of the system to collect the gases and fumes emitted from the affected source (e.g., hoods, exposed ductwork, dampers, fans) according to written procedures specified in your operation and maintenance plan. The inspection procedure must include the requirements in paragraphs (b)(2)(i) through (iii) of this section as applicable to the capture system or control device.

(i) Observations of the physical appearance of the equipment to confirm the physical integrity of the equipment (e.g., verify by visual inspection no holes in ductwork or hoods, no flow constrictions caused by dents, or accumulated dust in ductwork).

(ii) Inspection, and if necessary testing, of equipment components to confirm that the component is operating as intended (e.g., verify by appropriate measures that flow or pressure sensors, damper plates, automated damper switches and motors are operating according to manufacture or engineering design specifications).

(iii) In the event that a defective or damaged component is detected during an inspection, you must initiate corrective action according to written procedures specified in your operation and maintenance plan to correct the defect or deficiency as soon as practicable.

(3) *Copper converter department capture system operating limits.* You must establish, according to the requirements in paragraph (b)(3)(i) through (iii) of this section, operating limits for the capture system that are representative and reliable indicators of the performance of capture system when it is used to collect the process off-gas vented from batch copper converters during blowing.

(i) Select operating limit parameters appropriate for the capture system design that are representative and reliable indicators of the performance of the capture system when it is used to collect the process off-gas vented from batch copper converters during blowing. 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 the process off-gas from the batch copper converters during blowing. 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 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 relative to the fully open setting.

(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 batch copper converter blowing. If your blister copper production operations allow for more than one batch copper converter to be operating simultaneously in the blowing mode, designate the value or setting for the parameter at which the capture system operates during each possible batch copper converter blowing configuration that you may operate at your smelter (i.e., the operating limits with one converter blowing, with two converters blowing, with three converters blowing, as applicable to your smelter).

(iii) Include documentation in the 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 operation during blister copper 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 in §63.1452(a), and the data used to set the value or setting for the parameter for each of your batch copper converter configurations.

(4) *Baghouse leak detection corrective actions.* In the event a bag leak detection system alarm is triggered, you must initiate corrective action according to written procedures specified in your operation and maintenance plan 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, the activities listed in paragraphs (b)(3)(i) through (vi) of this section.

(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.

§63.1448 What are my general requirements for complying with this subpart?

(a) Before **[INSERT DATE 180 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER],** ~~Y~~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. On or after **[INSERT DATE 180 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL**

REGISTER], you must be in compliance with the emission limitations, work practice standards, and operation and maintenance requirements in this subpart at all times.

(b) During the period between the compliance date specified for your affected source in §63.1443, 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) Before **[INSERT DATE 180 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER],** ~~Y~~you must develop a written startup, shutdown, and malfunction plan according to the provisions in §63.6(e)(3). For affected sources, a startup, shutdown, and malfunction plan is not required on or after **[INSERT DATE 180 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER**.

(d) On or after **[INSERT DATE 180 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]**, use of a bypass stack shall constitute a violation of the filterable PM, mercury, benzene, toluene, chlorine, hydrogen chloride, PAH excluding naphthalene, naphthalene, and dioxin/furan emissions limits.

§63.1449 By what dates must I conduct performance tests or other initial compliance demonstrations?

(a) As required in §63.7(a)(2), you must conduct a performance test within 180 calendar days of the compliance date that is specified in §63.1443 for your affected source to demonstrate initial compliance with each emission and opacity limit in §§63.1443 and 63.1446 that applies to you.

(b) For each work practice standard and operation and maintenance requirement that applies to you where initial compliance is not demonstrated using a performance test or opacity

observation, you must demonstrate initial compliance within 30 calendar days after the compliance date that is specified for your affected source in §63.1443.

§63.1450 What test methods and other procedures must I use to demonstrate initial compliance with the emission limitations?

(a) ~~*Total*~~*Filterable particulate matter emission limits.* Before **[INSERT DATE 180 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]**, you must conduct each performance test to determine compliance with the ~~total~~filterable particulate matter emission limits in §63.1444 or §63.1446 that apply to you according to the requirements for representative test conditions specified in §63.7(e)(1) and using the test methods and procedures in paragraphs (a)(1) through (5) of this section. On or after **[INSERT DATE 180 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]**, you must conduct each performance test to determine compliance with the ~~total~~filterable particulate matter emission limits in §63.1444 or §63.1446 that apply to you according to the requirements for representative test conditions specified in paragraph (a)(6) of this section and using the test methods and procedures in paragraphs (a)(1) through (5) of this section.

(1) Determine the concentration of ~~total~~ filterable particulate matter according to the test methods in appendix A to part 60 of this chapter as specified in paragraphs (a)(1)(i) through (v~~iii~~) of this section.

(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 ~~total~~filterable particulate matter. You can also use ASTM D4536-96 incorporated by reference in §63.14 as an alternative to the sampling equipment and operating procedures in Method 5 or 17 when testing a positive pressure baghouse, but you must use the sample traverse location and number of sampling points described in Method 5D.

~~ to determine the concentration of filterable particulate matter.~~

(2) As an alternative to using the applicable method specified in paragraph (a)(1)(v) of this section, you may determine ~~total~~filterable particulate matter emissions from the control device using Method 29 in appendix A of part 60 of this chapter provided that you follow the procedures and precautions prescribed in Method 29. If the control device is a positive pressure baghouse, you must also follow the measurement procedure specified in sections 4.1 through 4.3 of Method 5D.

(3) You must conduct three separate test runs for each performance test. Each test run must have a minimum sampling time of 60 minutes and a minimum sampling volume of 0.85 dscm. For the purpose of determining compliance with the applicable ~~total~~filterable particulate matter emission limit, the arithmetic mean of the results for the three separate test runs is used.

(4) For a venturi wet scrubber applied to emissions from an affected source and subject to operating limits in §63.1444(g) or §63.1446(d) for pressure drop and scrubber water flow rate, you must establish site-specific operating limits according to the procedures in paragraph (a)(4)(i) and (ii) of this section.

(i) Using the continuous parameter monitoring system (CPMS) required in §63.1452, measure and record the pressure drop and scrubber water flow rate during each run of the particulate matter performance test.

(ii) 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.

(5) For a control device other than a baghouse or venturi wet scrubber applied to emissions from an affected source and subject to site-specific operating limit(s) in §63.1444(h) or §63.1446(e) for appropriate, site-specific operating parameters that are representative and reliable indicators of the control device performance, you must establish a site-specific operating limit(s) according to the procedures in paragraph (a)(5)(i) through (iv) of this section.

(i) Select one or more operating parameters, as appropriate for the control device design, that can be used as representative and reliable indicators of the control device operation.

(ii) Using the CPMS required in §63.1452, measure and record the selected operating parameters for the control device during each run of the ~~total~~filterable particulate matter performance test.

(iii) Compute and record the hourly average value for each of the selected operating parameters for each individual test run. Your operating limits are the lowest value or the highest value, as appropriate for the selected operating parameter, measured in any of the three runs that meet the applicable emission limit.

(iv) You must prepare written documentation to support your selection of the operating parameters used for the control device. This documentation must include a description of each selected parameter, a rationale for why you chose the parameter, a description of the method

used to monitor the parameter, and the data recorded during the performance test and used to set the operating limit(s).

(6) You must conduct each performance test that applies to your affected source under normal operating conditions of the affected source. The owner or operator may not conduct performance tests during periods of malfunction. The use of the bypass stack during a performance test shall invalidate the performance test. The owner or operator 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, t~~The owner or operator shall make available to the Administrator such records as may be necessary to determine the conditions of performance tests.

(b) *Nonsulfuric acid particulate matter emission limits.* Before **[INSERT DATE 180 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER],** ~~Y~~you must conduct each performance test to determine compliance with the nonsulfuric acid particulate matter emission limits in §63.1444 that apply to you according to the requirements for representative test conditions specified in §63.7(e)(1) and using the test methods and procedures in paragraphs (b)(1) and (2) of this section. On or after **[INSERT DATE 180 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]**, you must conduct each performance test to determine compliance with the nonsulfuric acid particulate matter emission limits in §63.1444 that apply to you according to the requirements for representative test conditions specified in (b)(3) of this section and using the test methods and procedures in paragraphs (b)(1) and (2) of this section.

(1) Determine the concentration of nonsulfuric acid particulate matter according to the test methods in appendix A to part 60 of this chapter as specified in paragraphs (b)(1)(i) through (v) of this section.

(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 5B to determine the nonsulfuric acid particulate matter emissions.

(2) You must conduct three separate test runs for each performance test. Each test run must have a minimum sampling time of 240 minutes and a minimum sampling volume of 3.4 dscm. For the purpose of determining compliance with the nonsulfuric acid particulate matter emission limit, the arithmetic mean of the results for the three separate test runs is used.

(3) You must conduct each performance test that applies to your affected source under normal operating conditions of the affected source. The owner or operator may not conduct performance tests during periods of malfunction. The use of the bypass stack during a performance test shall invalidate the performance test. The owner or operator 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. T~~Upon request, t~~he owner or operator shall make available to the Administrator such records as may be necessary to determine the conditions of performance tests.

(c) *Copper converter department capture system opacity limit.* You must conduct each performance test to determine compliance with the opacity limit in §63.1444 using the test methods and procedures in paragraphs (c)(1) through (9) of this section and during the particulate matter performance test.

(1) You must conduct the performance test during the period when the primary copper smelter is operating under conditions representative of the smelter's normal blister copper production rate. You may not conduct a performance test during periods of startup, shutdown, or malfunction. Before conducting the performance test, you must prepare a written test plan specifying the copper production conditions to be maintained throughout the opacity observation period and including a copy of the written documentation you have prepared according to paragraph (a)(3) of this section to support the established operating limits for the copper converter department capture system. You must submit a copy of the test plan for review and approval by the Administrator or delegated authority. During the observation period, you must collect appropriate process information and copper converter department capture system operating information to prepare documentation sufficient to verify that all opacity observations were made during the copper production and capture system operating conditions specified in the approved test plan.

(2) You must notify the Administrator or delegated authority before conducting the opacity observations to allow the Administrator or delegated authority the opportunity to have authorized representatives attend the test. Written notification of the location and scheduled date for conducting the opacity observations must be received by the Administrator on or before 30 calendar days before this scheduled date.

(3) You must gather the data needed for determining compliance with the opacity limit using qualified visible emission observers and process monitors as described in paragraphs (c)(3)(i) and (ii) of this section.

(i) Opacity observations must be performed by a sufficient number of qualified visible emission observers to obtain two complete concurrent sets of opacity readings for the required observation period. Each visible emission observer must be certified as a qualified observer by the procedure specified in section 3 of Method 9 in appendix A of part 60 of this chapter. The entire set of readings during the required observation period does not need to be made by the same two observers. More than two observers may be used to allow for substitutions and provide for observer rest breaks. The owner or operator must obtain proof of current visible emission reading certification for each observer.

(ii) A person (or persons) familiar with the copper production operations conducted at the smelter must serve as the indoor process monitor. The indoor process monitor is stationed at a location inside the building housing the batch copper converters such that he or she can visually observe and record operations that occur in the batch copper converter aisle during the times that the visible emission observers are making opacity readings. More than one indoor process monitor may be used to allow for substitutions and provide for rest breaks.

(4) You must make all opacity observations using Method 9 in appendix A to part 60 of this chapter and following the procedures described in paragraphs (c)(4)(i) and (ii) of this section.

(i) Each visible emission observer must make his or her readings at a position from the outside of the building that houses the copper converter department such that the observer's line-of-sight is approximately perpendicular to the longer axis of the converter building, and the

observer has an unobstructed view of the building roof monitor sections or roof exhaust fan outlets that are positioned over each of the batch copper converters inside the building. Opacity readings can only be made during those times when the observer's position meets the sun orientation and other conditions specified in section 2.1 of Method 9.

(ii) At 15-second intervals, each visible emission observer views the building roof monitor sections or roof exhaust fan outlets that are positioned over each of the batch copper converters inside the building and reads the opacity of the visible plumes. If no plume is visible, the observer records zero as the opacity value for the 15-second interval. In situations when it is possible for an observer to distinguish two or more visible emission plumes from the building roof monitor sections or roof exhaust fan outlets, the observer must identify, to the extent feasible, the plume having the highest opacity and record his or her opacity reading for that plume as the opacity value for the 15-second interval.

(5) You must make opacity observations for a period of sufficient duration to obtain a minimum of 120 1-minute intervals during which at least one copper converter is blowing and no interferences have occurred from other copper production events, as specified in paragraph (c)(7) of this section, which generate visible emissions inside the building that potentially can interfere with the visible emissions from the converter capture systems as seen by the outside observers. To obtain the required number of 1-minute intervals, the observation period may be divided into two or more segments performed on the same day or on different days if conditions prevent the required number of opacity readings from being obtained during one continuous time period. Examples of these conditions include, but are not limited to, changes in the sun's orientation relative to visible emission observers' positions such that the Method 9 conditions are no longer met or an unexpected thunder-storm. If the total observation period is divided into two or more

segments, all opacity observations must be made during the same set of copper production conditions described in your approved test plan as required by paragraph (c)(1) of this section.

(6) You must gather indoor process information during all times that the visible emission observers are making opacity readings outside the building housing the copper converter department. The indoor process monitor must continually observe the operations occurring in the copper converter department and prepare a written record of his or her observations using the procedure specified in paragraphs (c)(6)(i) through (iv) of this section.

(i) At the beginning of each observation period or segment, the clock time setting on the watch or clock to be used by the indoor process monitor must be synchronized with the clock time settings for the timepieces to be used by the outdoor opacity observers.

(ii) During each period or segment when opacity readings are being made by the visible emission observers, the indoor process monitor must continuously observe the operations occurring in the copper converter department and record his or her observations in a log book, on data sheets, or other type of permanent written format.

(iii) When a batch copper converter is blowing, a record must be prepared for the converter that includes, but is not limited to, the clock times for when blowing begins and when blowing ends and the converter blowing rate. This information may be recorded by the indoor process monitor or by a separate, automated computer data system.

(iv) The process monitor must record each event other than converter blowing that occurs in or nearby the converter aisle that he or she observes to generate visible emissions inside the building. The recorded entry for each event must include, but is not limited to, a description of the event and the clock times when the event begins and when the event ends.

(7) You must prepare a summary of the data for the entire observation period using the information recorded during the observation period by the outdoor visible emission observers and the indoor process monitor and the procedure specified in paragraphs (c)(7)(i) through (iv) of this section.

(i) Using the field data sheets, identify the 1-minute clock times for which a total of eight opacity readings were made and recorded by both observers at 15-second intervals according to the test procedures (i.e., a total of four opacity values have been recorded for the 1-minute interval by each of the two observers). Calculate the average of the eight 15-second interval readings recorded on the field data sheets by the two observers during the clock time minute interval (add the four consecutive 15-second interval opacity readings made by Observer A during the specified clock time minute, plus the four consecutive 15-second interval opacity readings made by Observer B during the same clock time minute, and divide the resulting total by eight). Record the clock time and the opacity average for the 1-minute interval on a data summary sheet. Figure 1 of this subpart shows an example of the format for the data summary sheet you may use, but are not required to use.

(ii) Using the data summary sheets prepared according to paragraph (c)(7)(i) of this section and the process information recorded according to paragraph (c)(6)(iii) of this section, identify those 1-minute intervals for which at least one of the batch copper converters was blowing.

(iii) Using the data summary sheets prepared according to paragraph (c)(7)(ii) of this section and the process information recorded according to paragraph (c)(6)(iv) of this section, identify the 1-minute intervals during which at least one copper converter was blowing but none of the interference events listed in paragraphs (c)(7)(iii)(A) through (F) of this section occurred.

Other ancillary activities not listed but conducted in or adjacent to the converter aisle during the opacity observations are not considered to be interference events (e.g., converter aisle cleaning, placement of smoking ladles or skulls on the converter aisle floor).

(A) Charging of copper matte, reverts, or other materials to a batch copper converter;

(B) Skimming slag or other molten materials from a batch copper converter;

(C) Pouring of blister copper or other molten materials from a batch copper converter;

(D) Return of slag or other molten materials to the flash smelting ~~furnace~~ vessel or slag cleaning vessel;

(E) Roll-out or roll-in of the batch copper converter; or

(F) Smoke and fumes generated inside the converter building by operation of the smelting ~~furnace~~vessel, the slag cleaning vessel (if used), anode refining and casting processes that drift into the copper converter department.

(iv) Using the data summary sheets prepared according to paragraph (c)(7)(iii) of this section, up to five 1-minute intervals following an interference event may be eliminated from data used for the compliance determination calculation specified in paragraph (c)(8) of this section by applying a time delay factor. The time delay factor must be a constant number of minutes not to exceed 5 minutes that is added to the clock time recorded when cessation of the interference event occurs. The same time delay factor must be used for all interference events (i.e., a constant time delay factor for the smelter of 1 minute, 2 minutes, 3 minutes, 4 minutes, or 5 minutes). The number of minutes to be used for the time delay factor is determined based on the site-specific equipment and converter building configuration. An explanation of the rationale for selecting the value used for the time delay factor must be prepared and included in the test report.

(8) You must use the data summary prepared in paragraph (c)(7) of this section to calculate the average opacity value for a minimum of 120 1-minute intervals during which at least one copper converter was blowing with no interference events as determined according to paragraphs (c)(7)(iii) and (iv) of this section. Average opacity is calculated using Equation 1 of this section:

$$VE_{ave} = \frac{1}{n}\sum_{i=1}^{n} VE_i \qquad (Eq. 1)$$

Where

VE_{ave} = Average opacity to be used for compliance determination (percent);

n = Total number of 1-minute intervals during which at least one copper converter was blowing with no interference events as determined according to paragraphs (c)(7)(iii) and (iv) of this section (at least 120 1-minute intervals);

i = 1-minute interval "i" during which at least one copper converter was blowing with no interference events as determined according to paragraphs (c)(7)(iii) and (iv) of this section; and

VE_i = Average opacity value calculated for the eight opacity readings recorded during 1-minute interval "i" (percent).

(9) You must certify that the copper converter department capture system operated during the performance test at the operating limits established in your capture system operation and maintenance plan using the procedure specified in paragraphs (c)(9)(i) through (iv) of this section.

(i) 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 §63.1452(a).

(ii) For any dampers that are manually set and remain in 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.

(iii) Review the recorded monitoring data. Identify and explain any times during batch copper converter blowing when the capture system operated outside the applicable operating limits.

(iv) Certify in your performance test report that during all observation period segments, the copper converter department capture system was operating at the values or settings established in your capture system operation and maintenance plan.

(d) *Mercury emissions.* Before **[INSERT DATE ~~3~~1 YEAR~~S~~ AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]**, you must conduct each performance test to determine compliance with the mercury emission limits in §63.1444 that apply to you according to the requirements for representative test conditions specified in (d)(3) of this section and using the test methods and procedures in paragraphs (d)(1) ~~through~~and (~~4~~2) of this section.

(1) Determine the concentration of mercury according to the test methods in appendix A to part 60 of this chapter as specified in paragraphs (d)(1)(i) through (v) of this section.

(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 29, 30A or 30B, as applicable, to determine the concentration of mercury. You can also use ASTM D6784 or equivalent incorporated by reference in §63.14.

(2) You must conduct three separate test runs for each performance test. Duration of sampling is at least two hours per run. If performing measurements using Method 29, you must collect a minimum sample volume of 1.7 dscm (60 dscf). For the purpose of determining compliance with the applicable ~~filterable particulate matter~~mercury emission limit, the arithmetic mean of the results for the three separate test runs is used.

(3) For a control device other than a baghouse or venturi wet scrubber applied to emissions from an affected source and subject to site-specific operating limit(s) in §63.1444(h) or §63.1446(e) for appropriate, site-specific operating parameters that are representative and reliable indicators of the control device performance, you must establish a site-specific operating limit(s) according to the procedures in paragraph (a)(5)(i) through (iv) of this section.

(i) Select one or more operating parameters, as appropriate for the control device design, that can be used as representative and reliable indicators of the control device operation.

(ii) Using the CPMS required in §63.1452, measure and record the selected operating parameters for the control device during each run of the mercury performance test.

(iii) Compute and record the hourly average value for each of the selected operating parameters for each individual test run. Your operating limits are the lowest value or the highest value, as appropriate for the selected operating parameter, measured in any of the three runs that meet the applicable emission limit.

(iv) You must prepare written documentation to support your selection of the operating parameters used for the control device. This documentation must include a description of each selected parameter, a rationale for why you chose the parameter, a description of the method

used to monitor the parameter, and the data recorded during the performance test and used to set the operating limit(s).

(43) You must conduct each performance test that applies to your affected source under normal operating conditions of the affected source. The owner or operator may not conduct performance tests during periods of malfunction. The use of the bypass stack during a performance test shall invalidate the performance test. The owner or operator 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. The owner or operator shall make available to the Administrator such records as may be necessary to determine the conditions of performance tests.

(e) *Anode refining, converter, and smelting process fugitive roof vent filterable particulate matter.* Before **[INSERT DATE 2 YEARS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]**, you must conduct each performance test to determine compliance with the roof vent fugitive filterable particulate matter emission limits in §63.1444 that apply to you according to the requirements for representative test conditions specified in (e)(3) of this section and using the test methods and procedures in paragraphs (e)(1) and (2) of this section.

(1) Determine the concentration of anode refining, converter and smelting process fugitive roof vent filterable particulate matter according to the test methods in appendix A to part 60 of this chapter as specified in paragraphs (e)(1)(i) through (v) of this section.

(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 5D or Oregon 8 to determine the anode refining, converter and smelting process fugitive roof vent filterable particulate matter emissions. Use the filter specified in section 7.2.1 of Method 29. An alternative test method may be requested to EPA OAR, OAQPS, Measurement Technology Group. ~~If there is a safety issue with the roof vent sampling, reference monitors may be used if from the List of Designated Reference and Equivalent Methods (*https://www3.epa.gov/ttnamti1/files/ambient/criteria/AMTIC%20List%20Dec%202016-2.pdf*).~~

(vi) Method 9 to establish opacity as an operating parameter, if appropriate.

(2) You must conduct three separate test runs for each performance test. Each test run must have a minimum sampling time of 12 hours. For the purpose of determining compliance with the filterable particulate matter emission limit, the arithmetic mean of the results for the three separate test runs for each roofline vent (*i.e.*, anode refining, converter department, smelter building) is used. The three test run average of the filterable particulate matter emission rates from each vent should be summed to compare to the emission limit in §63.1444.

(3) You must conduct each performance test that applies to your affected source under normal operating conditions of the affected source. The owner or operator may not conduct performance tests during periods of malfunction. The use of the bypass stack during a performance test shall invalidate the performance test. The owner or operator 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.

The owner or operator shall make available to the Administrator such records as may be necessary to determine the conditions of performance tests.

~~(f) *Converter and smelting fugitive roof vent filterable particulate matter.* Before **[INSERT DATE 1 YEAR AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]**, you must conduct each performance test to determine compliance with the converter and smelting fugitive roof vent filterable particulate matter emission limits in §63.1444 that apply to you according to the requirements for representative test conditions specified in (f)(3) of this section and using the test methods and procedures in paragraphs (f)(1) and (2) of this section.~~

~~(1) Determine the concentration of converter and smelting fugitive roof vent filterable particulate matter according to the test methods in appendix A to part 60 of this chapter as specified in paragraphs (f)(1)(i) through (v) of this section.~~

~~(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 5D or Oregon 8 to determine the converter and smelting fugitive roof vent filterable particulate matter emissions. Use the filter specified in section 7.2.1 of Method 29. An alternative test method may be requested to EPA OAR, OAQPS, Measurement Technology Group.~~

~~(vi) Method 9 to establish opacity as an operating parameter, if appropriate.~~

~~(2) You must conduct three separate test runs for each performance test. Each test run must have a minimum sampling time of 12 hours. For the purpose of determining compliance with the filterable particulate matter emission limit, the arithmetic mean of the results for the three separate test runs is used.~~

~~(3) You must conduct each performance test that applies to your affected source under normal operating conditions of the affected source. The owner or operator may not conduct performance tests during periods of malfunction. The owner or operator 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. The owner or operator shall make available to the Administrator such records as may be necessary to determine the conditions of performance tests.~~

(f) *Benzene, toluene, chlorine, hydrogen chloride, polycyclic aromatic hydrocarbons excluding naphthalene, naphthalene, and dioxins/furans emissions.* Before **[INSERT DATE 1 YEAR AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]**, you must conduct each performance test to determine compliance with the benzene, toluene, chlorine, hydrogen chloride, polycyclic aromatic hydrocarbons excluding naphthalene, naphthalene, and dioxins/furans emission limits in Table 2 of this subpart that apply to you according to the requirements for representative test conditions specified in (f)(6) of this section and using the test methods and procedures in paragraphs (f)(1) and (5) of this section.

(1) Use the methods specified in paragraphs (f)(1)(i) through (1)(iv) of this section to select sampling port locations and the number of traverse points and to determine the volumetric flow rate, dry molecular weight, and moisture content of the stack gas.

(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.

(2) Determine the concentration of benzene and toluene for each stack using Method 18 in 40 CFR part 60, Appendix A to determine the concentration of benzene and toluene; or as an alternative ASTM D6420-99 (Reapproved 2010), Standard Test Method for Determination of Gaseous Organic Compounds by Direct Interface Gas Chromatography – Mass Spectrometry (GC/MS) incorporated by reference in §63.14, may be used provided that the target compound(s) are those listed in section 1.1 of ASTM D6420-99 (Reapproved 2010) as measurable; the target compounds do not include methane and ethane because their atomic mass is less than 35; and the test results are not a total VOC method. Each test must consist of three separate runs. The duration of sampling must be at least two hours per run.

(3) Determine the concentration of chlorine and hydrogen chloride for each stack using Method 26A in 40 CFR part 60, Appendix A. Each test must consist of three separate runs. The minimum sample volume must be at least 2 dry cubic meters per run. Each run must be conducted for a minimum of 1 hour.

(4) Determine the concentration of polycyclic aromatic hydrocarbons excluding naphthalene, naphthalene, and dioxins/furans for each stack using Method 23 in 40 CFR part 60, Appendix A. Each test must consist of three separate runs. The test duration must be at least 3 hours and the must be at least 3 dscm (106 dscf).

(5) During each stack test run, measure the weight of concentrated ore fed and calculate the emissions rate in pounds of pollutant per ton of concentrated ore fed (lb/ton), except for dioxins/furans which should be calculated in nanograms of pollutant per megagram of concentrated ore fed (ng/Mg) for each test run. If any measurement result is reported as below the method detection limit, use the method detection limit for that value when calculating the emission rate. Calculate the total emissions rate for each test run by summing the emissions across all stacks, as shown in Equation 1 of this section.

$$E_{f,i} = \sum_{s=1}^{n} \frac{C_s \times Q_x}{P_s} \quad (Eq. 1)$$

Where: $E_{f,i}$ = Emissions rate for test run "i" for all emission stacks at the facility "f", lb/ton or ng/Mg, as applicable of concentrated ore fed

Cs = Emission rate for stack "s" measured during test run "i" on at facility "f", lb/dscf,

Qs = Average volumetric flow rate of stack gas measured at stack "s" during test run "i" at facility "f", dscf/hour; and

n = Number of emissions stacks at facility "f".

(5) Calculate the average emissions rate for each facility using the three test runs, as shown in Equation 1 of this section. For the purposes of determining compliance with the applicable emission limits in Table 2 of this subpart, the arithmetic mean of the results for the three separate test runs is used as calculated using Equation 2 of this section.

$$E_f = \frac{E_1 + E_2 + E_3}{3} \quad (Eq. 2)$$

Where: E_f = Average emission rate for facility "f", lb/ton or ng/Mg of concentrated ore fed, as applicable.

E_1 = Emissions rate for run 1 for facility "f", lb/ton or ng/Mg of concentrated ore fed, as applicable.

E_2 = Emissions rate for run 2 for facility "f", lb/ton or ng/Mg of concentrated ore fed, as applicable.

E_3 = Emissions rate for run 3 for facility "f", lb/ton or ng/Mg of concentrated ore fed, as applicable.

(6) You must conduct each performance test that applies to your affected source under normal operating conditions of the affected source. The owner or operator may not conduct performance tests during periods of malfunction. The use of the bypass stack during a performance test shall invalidate the performance test. The owner or operator 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. The owner or operator shall make available to the Administrator such records as may be necessary to determine the conditions of performance tests.

§63.1451 How do I demonstrate initial compliance with the emission limitations, work practice standards, and operation and maintenance requirements that apply to me?

(a) ~~*Total*~~*Filterable particulate matter emission limits.* For each copper concentrate dryer, smelting ~~furnace~~vessel, slag cleaning vessel, ~~and~~ copper converter department, and anode refining department subject to a ~~total~~filterable particulate matter emission limits in §63.1444 or §63.1446 that applies to you, you have demonstrated initial compliance if you meet both of the conditions in paragraphs (a)(1) and (2) of this section.

(1) The average concentration of ~~total~~filterable particulate matter from a control device applied to emissions from the affected source, measured according to the performance test procedures in §63.1450(a), did not exceed the applicable emission limit.

(2) You have submitted a notification of compliance status according to the requirements in §63.1454(e).

(b) *Nonsulfuric acid particulate matter emissions limits.* For each smelting ~~furnace~~vessel, slag cleaning vessel, and copper converter departments subject to the nonsulfuric acid particulate matter emissions limit in §63.1444 as applies to you, you have demonstrated initial compliance if you meet both of the conditions in paragraphs (b)(1) and (2) of this section.

(1) The average concentration of nonsulfuric acid particulate matter in the process off-gas discharged from the affected source, measured according to the performance test procedures in §63.1450(b), did not exceed 6.2 mg/dscm.

(2) You have submitted a notification of compliance status according to the requirements in §63.1454(e).

(c) *Copper converter department visible emissions.* For each existing copper converter department subject to the opacity limit in §63.1444, you have demonstrated initial compliance if you meet both of the conditions in paragraphs (c)(1) and (2) of this section.

(1) The opacity of visible emissions exiting the roof monitors or roof exhaust fans on the building housing the copper converter department measured according to the performance test procedures in §63.1450(c), did not exceed 4 percent opacity.

(2) You have submitted a notification of compliance status according to the requirements in §63.1454(e).

(d) *Copper converter department capture systems.* You have demonstrated initial compliance of the copper converter department capture system if you meet all of the conditions in paragraphs (d)(1) through (4) of this section.

(1) Prepared the capture system operation and maintenance plan according to the requirements of paragraph (a) of this section;

(2) Conducted an initial performance test according to the procedures of §63.1450(c) demonstrating the opacity of any visible emissions exiting the roof monitors or roof exhaust fans on the building housing the copper converter department does not exceed 4 percent opacity;

(3) Included in your notification of compliance status a copy of your written capture system operation and maintenance plan and have certified in your notification of compliance status that you will operate the copper converter department capture system at all times during blowing at the values or settings established for the operating limits in that plan; and

(4) Submitted a notification of compliance status according to the requirements in §63.1454(e).

(e) *Baghouses.* For each baghouse subject to operating limits in §63.1444(f) or §63.1446(c), you have demonstrated initial compliance if you meet all of the conditions in paragraphs (e)(1) through (3) of this section.

(1) You have included in your written operation and maintenance plan required under §63.1447(b) detailed descriptions of the procedures you use for inspection, maintenance, bag leak detection, and corrective action for the baghouse.

(2) You have certified in your notification of compliance status that you will operate the baghouse according to your written operation and maintenance plan.

(3) You have submitted the notification of compliance status according to the requirements in §63.1454(e).

(f) *Venturi wet scrubbers.* For each venturi wet scrubber subject to operating limits in §63.1444(g) or §63.1446(d), you have demonstrated initial compliance if you meet all of the conditions in paragraphs (f)(1) through (3) of this section.

(1) Established site-specific operating limits for pressure drop and scrubber water flow rate and have a record of the pressure drop and scrubber water flow rate measured during the performance test you conduct to demonstrate initial compliance with paragraph (a) of this section.

(2) Certified in your notification of compliance status that you will operate the venturi wet scrubber within the established operating limits for pressure drop and scrubber water flow rate.

(3) Submitted a notification of compliance status according to the requirements in §63.1454(e).

(g) *Other control devices.* For each control device other than a baghouse or venturi wet scrubber subject to operating limits in §63.1444(h) or §63.1446(e), you have demonstrated initial compliance if you meet all of the conditions in paragraphs (g)(1) through (4) of this section.

(1) Selected one or more operating parameters, as appropriate for the control device design, that can be used as representative and reliable indicators of the control device operation.

(2) Established site-specific operating limits for each of the selected operating parameters based on values measured during the performance test you conduct to demonstrate initial compliance with paragraph (a) of this section and have prepared written documentation according to the requirements in §63.1450(a)(5)(iv).

(3) Included in your notification of compliance status a copy of the written documentation you have prepared to demonstrate compliance with paragraph (g)(2) of this section and have certified in your notification of compliance status that you will operate the control device within the established operating limits.

(4) Submitted a notification of compliance status according to the requirements in §63.1454(e).

(h) *Fugitive dust sources.* For all fugitive dust sources subject to work practice standards in §63.1445, you have demonstrated initial compliance if you meet all of the conditions in paragraphs (i)(1) through (3) of this section.

(1) Prepared a written fugitive dust control plan according to the requirements in §63.1454 and it has been approved by the ~~designated~~ delegated authority.

(2) Certified in your notification of compliance status that you will control emissions from the fugitive dust sources according to the procedures in the approved plan.

(3) Submitted the notification of compliance status according to the requirements in §63.1454(e).

(i) *Operation and maintenance requirements.* You have demonstrated initial compliance with the operation and maintenance requirements that apply to you if you meet all of the conditions in paragraphs (i)(1) through (3) of this section.

(1) Prepared an operation and maintenance plan according to the requirements in §63.1454(b).

(2) Certified in your notification of compliance status that you will operate each capture system and control device according to the procedures in the plan.

(3) Submitted the notification of compliance status according to the requirements in §63.1454(e).

(j) *Mercury emissions.* For any combination of copper concentrate dryer, smelting vessel, copper converter department, and anode refining department subject to a mercury emission limit in §63.1444 that applies to you, you have demonstrated initial compliance if you meet both of the conditions in paragraphs (j)(1) and (2) of this section.

(1) The average concentration of mercury emissions from the affected sources measured according to the performance test procedures in §63.1450(d), did not exceed the applicable emission limit.

(2) Established a site-specific operating limit for a parameter based on values measured during the performance test you conduct to demonstrate initial compliance with paragraph (a) of this section and have prepared written documentation according to the requirements in §63.1450(d).

(2) You have submitted a notification of compliance status according to the requirements in §63.1454(e).

(k) *Roofline fugitive filterable particulate matter.* For emissions from the smelting building roofline vents, copper converter department roof-line vents, and anode refining department roofline vents subject to a filterable particulate matter emission limit in §63.1444, you have demonstrated initial compliance if you meet the conditions in paragraphs (k)(1), (2) and (3) of this section.

(1) The average concentration of filterable particulate matter emissions from the affected sources measured according to the performance test procedures in §63.1450(e) ~~and (f)~~, did not exceed the applicable emission limit.

(2) Established a site-specific operating limit for a parameter, like opacity, based on values measured during the performance test you conduct to demonstrate initial compliance with paragraph (a) of this section and have prepared written documentation according to the requirements in §63.1450(e) ~~and (f)~~.

(3) You have submitted a notification of compliance status according to the requirements in §63.1454(e).

(l) *Benzene, toluene, chlorine, hydrogen chloride, polycyclic aromatic hydrocarbons excluding naphthalene, naphthalene, and dioxins/furans emissions.* For any combination of copper concentrate dryer, smelting vessel, copper converter department, and anode refining department subject to the benzene, toluene, chlorine, hydrogen chloride, polycyclic aromatic hydrocarbons excluding naphthalene, naphthalene, and dioxins/furans emission limits in Table 2 of this subpart, you have demonstrated initial compliance if you meet both of the conditions in paragraphs (j)(1) and (2) of this section.

(1) The average concentration of benzene, toluene, chlorine, hydrogen chloride, polycyclic aromatic hydrocarbons excluding naphthalene, naphthalene, and dioxins/furans emissions from the affected sources measured according to the performance test procedures in §63.1450(f), did not exceed the applicable emission limit.

(2) You have submitted a notification of compliance status according to the requirements in §63.1454(e).

§63.1452 What are my monitoring requirements?

(a) *Copper converter department capture systems.* For each operating limit established under your capture system operation and maintenance plan, you must install, operate, and maintain an appropriate monitoring device according the requirements in paragraphs (a)(1)

though (6) of this section to measure and record the operating limit value or setting at all times the copper converter department capture system is operating during batch copper converter blowing. Dampers that are manually set and remain in the same position at all times the capture system is operating are exempted from the requirements of this paragraph (a).

(1) Install the monitoring device, associated sensor(s), and recording equipment according to the manufacturers' specifications. Locate the sensor(s) used for monitoring in or as close to a position that provides a representative measurement of the parameter being monitored.

(2) If a flow measurement device is used to monitor the operating limit parameter, you must meet the requirements in paragraph (a)(2)(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.

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

(iii) Reduce swirling flow or abnormal velocity distributions due to upstream and downstream disturbances.

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

(3) If a pressure measurement device is used to monitor the operating limit parameter, you must meet the requirements in paragraph (a)(3)(i) through (v) of this section.

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

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

(iii) 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.

(iv) Check pressure tap pluggage daily.

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

(4) Conduct calibration and validation checks any time the sensor exceeds the manufacturer's specifications or you install a new sensor.

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

(6) Record the results of each inspection, calibration, and validation check.

(b) *Baghouses.* For each baghouse subject to the operating limit in §63.1444(f) or §63.1446(c) for the bag leak detection system alarm, you must at all times monitor the relative change in particulate matter loadings using a bag leak detection system according to the requirements in paragraph (b)(1) of this section and conduct regular inspections according to the requirements in paragraph (b)(2) of this section.

(1) You must install, operate, and maintain each bag leak detection system according to the requirements in paragraphs (b)(1)(i) through (vii) of this section.

(i) 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.

(ii) The system must provide output of relative changes in particulate matter loadings.

(iii) 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.

(iv) 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 obtain a copy of this guidance document by contacting the National Technical Information Service (NTIS) at 800-553-6847. 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.

(v) 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.

(vi) 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.

(vii) Where multiple detectors are required, the system's instrumentation and alarm may be shared among detectors.

(2) You must conduct baghouse inspections at their specified frequencies according to the requirements in paragraphs (b)(2)(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 (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.

(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) *Venturi wet scrubbers.* For each venturi wet scrubber subject to the operating limits for pressure drop and scrubber water flow rate in §63.1444(g) or §63.1446(d), you must at all times monitor the hourly average pressure drop and water flow rate using a CPMS. You must install, operate, and maintain each CPMS according to the requirements in paragraphs (c)(1) and (2) of this section.

(1) For the pressure drop CPMS, you must meet the requirements in paragraphs (c)(1)(i) through (vi) of this section.

(i) Locate the pressure sensor(s) in or as close 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.

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

(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, inspect all components for integrity, all electrical connections for continuity, and all mechanical connections for leakage.

(2) For the scrubber water flow rate CPMS, you must meet the requirements in paragraphs (c)(2)(i) through (iv) of this section.

(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, inspect all components for integrity, all electrical connections for continuity, and all mechanical connections for leakage.

(d) *Other control devices and operating parameters.* For each control device other than a baghouse or venturi wet scrubber subject to the operating limits for appropriate parameters in §63.1444(h) or §63.1446(e), you must at all times monitor each of your selected parameters using an appropriate CPMS. You must install, operate, and maintain each CPMS according to

the equipment manufacturer's specifications and the requirements in paragraphs (d)(1) though (5) of this section.

(1) Locate the sensor(s) used for monitoring in or as close to a position that provides a representative measurement of the parameter being monitored.

(2) Determine the hourly average of all recorded readings.

(3) Conduct calibration and validation checks any time the sensor exceeds the manufacturer's specifications or you install a new sensor.

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

(5) Record the results of each inspection, calibration, and validation check.

(e) 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) at all times an affected source is operating.

(f) 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.

(g) 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.

§63.1453 How do I demonstrate continuous compliance with the emission limitations, work practice standards, and operation and maintenance requirements that apply to me?

(a) *Particulate matter emission limits.* For each affected source subject to a particulate matter emission limit §63.1444 or §63.1446 as applies to you, you must demonstrate continuous compliance according to the requirements in paragraphs (a)(1) and (2) of this section.

(1) For each copper concentrate dryer, smelting ~~furnace~~vessel, slag cleaning vessel, ~~and~~ copper converter department, and anode refining department subject to a ~~total~~filterable particulate matter emission limit in §63.1444 or §63.1446 as applies to you, you must demonstrate continuous compliance by meeting the conditions in paragraphs (a)(1)(i) ~~and~~ through (iii) of this section.

(i) Maintain the average concentration of ~~total~~filterable particulate matter in the gases discharged from the affected source at or below the applicable emission limit.

(ii) Monitor the operating parameter established during the performance test according to the requirements in §63.1450 and §63.1452 and collecting, reducing, and recording the monitoring data for each of the operating limit parameters according to the applicable requirements of this subpart;

(iii) Conduct subsequent performance tests following your initial performance test no less frequently than once per year according to the performance test procedures in §63.1450(a).

(2) For each smelting ~~furnace~~vessel, slag cleaning vessel, and copper converter department subject to the nonsulfuric acid particulate matter emission limit in §63.1444 as applies to you, you must demonstrate continuous compliance by meeting the conditions in paragraphs (a)(2)(i) ~~and~~ through (iii) of this section.

(i) Maintain the average concentration of nonsulfuric acid particulate matter in the process off-gas discharged from the affected source at or below 6.2 mg/dscm.

(ii) Monitor the operating parameter established during the performance tests according to the requirements in §63.1450 and §63.1452 and collecting, reducing, and recording the monitoring data for each of the operating limit parameters according to the applicable requirements of this subpart;

(iii) Conduct subsequent performance tests following your initial performance test no less frequently than once per year according to the performance test procedures in §63.1450(b).

(b) *Copper converter department capture systems.* You must demonstrate continuous compliance of the copper converter department capture system by meeting the requirements in paragraphs (b)(1) through (4) of this section.

(1) Operate the copper converter department capture system at all times during blowing at or above the lowest values or settings established for the operating limits and demonstrated to achieve the opacity limit according to the applicable requirements of this subpart;

(2) Inspect and maintain the copper converter department capture system according to the applicable requirements in §63.1447 and recording all information needed to document conformance with these requirements;

(3) Monitor the copper converter department capture system according to the requirements in §63.1452(a) and collecting, reducing, and recording the monitoring data for each of the operating limit parameters according to the applicable requirements of this subpart; and

(4) Conduct subsequent performance tests according to the requirements of §63.1450(c) following your initial performance test no less frequently than once per year to demonstrate that

the opacity of any visible emissions exiting the roof monitors or roof exhaust fans on the building housing the copper converter department does not exceed 4 percent opacity.

(c) *Baghouses.* For each baghouse subject to the operating limit for the bag leak detection system alarm in §63.1444(f) or §63.1446(c), you must demonstrate continuous compliance by meeting the requirements in paragraphs (c)(1) through (3) of this section.

(1) Maintain the baghouse such that the bag leak detection system alarm does not sound for more than 5 percent of the operating time during any semiannual reporting period. To determine the percent of time the alarm sounded use the procedures in paragraphs (c)(1)(i) through (v) of this section.

(i) Alarms that occur due solely to a malfunction of the bag leak detection system are not included in the calculation.

(ii) Before **[INSERT DATE 180 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]**, ~~A~~alarms that occur during startup, shutdown, or malfunction are not included in the calculation if the condition is described in the startup, shutdown, and malfunction plan, and you operated the source during such periods in accordance with §63.6(e)(1). On or after **[INSERT DATE 180 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]**, alarms that occur due solely to a malfunction of the bag leak detection system are not included in the calculation.

(iii) Count 1 hour of alarm time for each alarm when you initiated procedures to determine the cause of the alarm within 1 hour.

(iv) Count the actual amount of time you took to initiate procedures to determine the cause of the alarm if you did not initiate procedures to determine the cause of the alarm within 1 hour of the alarm.

(v) Calculate the percentage of time the alarm on the bag leak detection system sounds as the ratio of the sum of alarm times to the total operating time multiplied by 100.

(2) Maintain records of the times the bag leak detection system alarm sounded, and for each valid alarm, the time you initiated corrective action, the corrective action(s) taken, and the date on which corrective action was completed.

(3) Inspect and maintain each baghouse according to the requirements in §63.1451(b)(2) 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 §63.1451(b)(1)(vi), you must include a copy of the required written certification by a responsible official in the next semiannual compliance report.

(d) *Venturi wet scrubbers.* For each venturi wet scrubber subject to the operating limits for pressure drop and scrubber water flow rate in §63.1444(g) or §63.1446(d), you must demonstrate continuous compliance by meeting the requirements of paragraphs (d)(1) through (3) of this section.

(1) Maintain 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) Inspect and maintain each venturi wet scrubber CPMS according to §63.1452(c) and recording all information needed to document conformance with these requirements; and

(3) Collect and reduce monitoring data for pressure drop and scrubber water flow rate according to §63.1452(e) and recording all information needed to document conformance with these requirements.

(e) *Other control devices.* For each control device other than a baghouse or venturi wet scrubber subject to the operating limits for site-specific operating parameters in §63.1444(h) or

§63.1446(e), you must demonstrate continuous compliance by meeting the requirements of paragraphs (e)(1) through (3) of this section:

(1) Maintain the hourly average rate at levels no lower than those established during the initial or subsequent performance test;

(2) Inspect and maintain each CPMS operated according to §63.1452(d) and record all information needed to document conformance with these requirements; and

(3) Collect and reduce monitoring data for selected parameters according to §63.1452(e) and recording all information needed to document conformance with these requirements.

(f) *Fugitive dust sources.* For each fugitive dust source subject to work practice standards in §63.1445, you must demonstrate continuous compliance by implementing all of fugitive control measures specified for the source in your written fugitive dust control plan.

(g) *Mercury emissions.* For each affected source subject to mercury emissions limit in §63.1444 as applies to you must demonstrate continuous compliance according to the requirements in paragraph (g)(1), or (2), and (3).

(1) Maintain the average concentration of mercury discharged from the facility at or below the emission limit in §63.1444 monitored by a mercury continuous emissions monitoring system (Hg CEMS)., If the Hg CEMS is used, you must demonstrate continuous compliance according to the requirements in paragraphs (g)(1)(i) through (v).

(i) Install and operate a Hg CEMS in accordance with Performance Specification 12A (PS 12A) of appendix B to part 60 of this chapter.

(ii) Maintain each Hg CEMS according to the quality assurance requirements in Procedure 5 of appendix F to part 60 of this chapter. The relative accuracy testing of Hg CEMS must be conducted at normal operating conditions.

(iii) Use a span value for any Hg CEMS that represents the mercury concentration corresponding to approximately two times the emissions standard and may be rounded up to the nearest multiple of 5 $\mu g/m^3$ of total mercury or higher level if necessary to include Hg concentrations which may occur.

(iv) Determine the average on a 2-hour rolling basis.

(v) Install, operate, calibrate, and maintain an instrument for continuously measuring and recording the exhaust gas flow rate to the atmosphere.

or.

(2) Monitor the operating parameter established during the performance tests according to the requirements in §63.1450 and §63.1452 and collecting, reducing, and recording the monitoring data for each of the operating limit parameters according to the applicable requirements of this subpart.

(3) Cconducting subsequent performance tests following your initial performance test no less frequently than once per year according to the performance test procedures in §63.1450(~~a~~d).

(h) *Fugitive filterable particulate matter.* For each affected source subject to a fugitive filterable particulate matter emission limit §63.1444 as applies to you, you must demonstrate continuous compliance according to the requirements in paragraphs (h)(1) and (2) of this section.

(1) *Operating Parameter.* You must demonstrate continuous compliance with the established site-specific operating limit for a parameter, like opacity, based on values measured during the performance test you conduct to demonstrate initial compliance with paragraph (h) of this section. If the operating parameter is VE at each roof vent, you must meet the requirements in paragraphs (h)(1)(i) through (v) of this section.

(i) Perform daily VE observations of each roof vent 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 20 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 roof vent 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 roof vent; or

(B) No opacity greater than 20 percent is observed during any of the Method 9 tests for any roof vent.

(iv) If VE are observed during any weekly test and opacity greater than 20 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 roof vent 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 20 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) Monitor the site-specific operating parameter established during the performance tests according to the requirements in §63.1450(e) ~~and (f)~~ and §63.1452 and collecting, reducing, and recording the monitoring data for each of the operating limit parameters according to the applicable requirements of this subpart.

(i) *Benzene, toluene, chlorine, hydrogen chloride, polycyclic aromatic hydrocarbons excluding naphthalene, naphthalene, and dioxins/furans emissions.* For each affected source subject to benzene, toluene, chlorine, hydrogen chloride, polycyclic aromatic hydrocarbons excluding naphthalene, naphthalene, and dioxins/furans emission limits in Table 2 of this subpart, you must demonstrate continuous compliance by conducting subsequent performance tests following your initial performance test at least once every five years according to the performance test procedures in §63.1450(f).

§63.1454 What notifications must I submit and when?

(a) You must submit all of the notifications in §§63.6(h)(4) and (h)(5), 63.7(b) and (c), 63.8(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 start your affected source before June 12, 2002, you must submit your initial notification not later than October 10, 2002.

(c) As specified in §63.9(b)(3), if you start your new affected source on or after June 12, 2002, you must submit your 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, opacity observation, or other initial compliance demonstration, you must submit a notification of compliance status according to §63.9(h)(2)(ii) by the date specified in paragraph (e)(1) or (2) of this section as applies to you.

(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.

(2) For each initial compliance demonstration that includes 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).

§63.1455 What reports must I submit and when?

(a) You must submit each report in paragraphs (a)(1) and (2) of this section that applies to you.

(1) You must submit a compliance report semiannually according to the requirements in paragraph (b) of this section and containing the information in paragraph (c) of this section.

(2) Before **[INSERT DATE 180 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER],** ~~Y~~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 startup, shutdown, and malfunction plan. You must report the actions taken for the event by fax or telephone within 2 working days after starting actions inconsistent with

the plan. You must submit the information in §63.10(d)(5)(ii) of this part by letter within 7 working days after the end of the event unless you have made alternative arrangements with the permitting authority. On or after **[INSERT DATE 180 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]**, you must report any deviation from an applicable standard in §§63.1444, 63.1445, and 63.1446 as part of your semiannual compliance report and include the information required in paragraph (c) of this section.

(b) Unless the Administrator has approved a different schedule under §63.10(a), you must submit each compliance report required in paragraph (a) of this section according to the applicable 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 §63.1443 and ending on June 30 or December 31, whichever date comes first after the compliance date that is specified for your source in §63.1443.

(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) 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 in paragraphs (b)(1) through (4) of this section.

(c) Each compliance report must contain the information in paragraphs (c)(1) through (3) of this section and, as applicable, paragraphs (c)(4) through (8) of this section.

(1) Company name and address.

(2) Statement by a responsible official, as defined in 40 CFR 63.2, with that official's name, title, and signature, certifying the accuracy and completeness of the content of the report.

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

(4) Before **[INSERT DATE 180 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]**, ~~I~~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). On or after **[INSERT DATE 180 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]**, you are not required to have a startup, shutdown, and malfunction plan and you are not required to include in your report the information in §63.10(d)(5)(i).

(5) If there are no deviations from any emission limitations (emission limit, operating limit, opacity limit) that applies to you and there are no deviations from the requirements for work practice standards in this subpart, 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 an 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 monitoring system was out-of-control during the reporting period.

(7) For each deviation from an emission limitation (emission limit, operating limit, opacity limit) and for each deviation from the requirements for work practice standards that occurs at an affected source where you are not using a continuous monitoring system to comply with the emission limitations or work practice standards in this subpart, the compliance report must contain the information in paragraphs (~~b~~c)(1) through (4) of this section and the information in paragraphs (~~b~~c)(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, date, time, duration, and cause of deviations (including unknown cause, if applicable), as applicable, ~~and~~ the corrective action taken, a list of the affected sources or equipment, 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. Examples of methods used to estimate the emissions include product-loss calculations, mass balance calculations, measurements when available, or engineering judgment based on known process parameters.~~.~~

(8) For each deviation from an emission limitation (emission limit, operating limit, opacity limit, and visible emission limit) occurring at an affected source where you are using an operating parameter monitoring system to comply with the emission limitation in this subpart, you must include the information in paragraphs (~~b~~c)(1) through (4) of this section and the

information in paragraphs (c)(8)(i) through (xi) of this section. ~~This includes periods of startup, shutdown, and malfunction.~~

(i) The cause of each deviations (including unknown cause, if applicable), the corrective action taken, a list of the affected sources or equipment, 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. Examples of methods used to estimate the emissions include product-loss calculations, mass balance calculations, measurements when available, or engineering judgment based on known process parameters.~~The date and time that each malfunction started and stopped.~~

(ii) If the monitoring system was inoperative, ~~T~~the date and time that each monitoring system was inoperative, except for zero (low-level) and high-level checks.

(iii) If the monitoring system was inoperative, ~~T~~the date, time and duration that each monitoring system was out-of-control, including the information in §63.8(c)(8).

(iv) The number, 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 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 that reporting period.

(viii) A brief description of the process units.

(ix) A brief description of the monitoring system.

(x) The date of the latest monitoring system certification or audit.

(xi) A description of any changes in continuous monitoring systems, processes, or controls since the last reporting period.

(d) If you have 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 you submit a compliance report pursuant to paragraph (a) of this section 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), or work practice requirement in this subpart, submission of the compliance report is deemed to satisfy 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 the permit authority.

(e) *Performance Test and CMS Performance Evaluation Reports.* Within 60 days after the date of completing each performance test or continuous monitoring system (CMS) performance evaluation (as defined in §63.2) required by this subpart, the owner or operator must submit the results of the performance test or performance evaluation according to the manner specified by either paragraph (e)(1) or (3) of this section.

(1) *Data collected using test methods supported by the EPA's Electronic Reporting Tool (ERT) as listed on the EPA's ERT website (https://www.epa.gov/electronic-reporting-air-emissions/electronic-reporting-tool-ert) at the time of the test.* Submit the results of the

performance test or the performance evaluation of CMS measuring relative accuracy test audit (RATA) pollutants to the EPA via the Compliance and Emissions Data Reporting Interface (CEDRI), which can be accessed through the EPA's Central Data Exchange (CDX) (*https://cdx.epa.gov/*). The data must be submitted in a file format generated through the use of the EPA's ERT. Alternatively, you may submit an electronic file consistent with the extensible markup language (XML) schema listed on the EPA's ERT website.

(2) *Data collected using test methods that are not supported by the EPA's ERT as listed on the EPA's ERT website at the time of the test.* The results of the performance test or the performance evaluation of CMS measuring RATA pollutants by methods that are not supported by the ERT, must be included as an attachment in the ERT or an alternate electronic file consistent with the XML schema listed on the EPA's ERT website. Submit the ERT generated package or alternative file to the EPA via CEDRI.

(3) *Confidential business information (CBI)*. If you claim some of the information submitted under paragraph (e) is CBI, you must submit a complete file, including information claimed to be CBI, to the EPA. The file must be 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 website. Submit the file on a compact disc, flash drive or other commonly used electronic storage medium and clearly mark the medium as CBI. Mail the electronic medium to U.S. EPA/OAQPS/CORE CBI Office, Attention: Group Leader, Measurement Policy Group, MD C404-02, 4930 Old Page Rd., Durham, NC 27703. The same file with the CBI omitted must be submitted to the EPA via the EPA's CDX as described in paragraph (e) of this section.

(f) *Submitting reports electronically*. If you are required to submit reports following the procedure specified in this paragraph, you must submit reports to the EPA via CEDRI, which can

be accessed through the EPA's CDX (*https://cdx.epa.gov/*). You must use the appropriate electronic report template on the CEDRI website (*https://www.epa.gov/electronic-reporting-air-emissions/compliance-and-emissions-data-reporting-interface-cedri*) for this subpart. The report must be submitted by the deadline specified in this subpart, regardless of the method in which the report is submitted. If you claim some of the information required to be submitted via CEDRI is confidential business information (CBI), submit a complete report, including information claimed to be CBI, to the EPA. The report must be generated using the appropriate form on the CEDRI website. Submit the file on a compact disc, flash drive, or other commonly used electronic storage medium and clearly mark the medium as CBI. Mail the electronic medium to U.S. EPA/OAQPS/CORE CBI Office, Attention: Group Leader, Measurement Policy Group, MD C404-02, 4930 Old Page Rd., Durham, NC 27703. The same file with the CBI omitted must be submitted to the EPA via the EPA's CDX as described earlier in this paragraph.

(g) *Claims of EPA system outage*. If you are required to electronically submit a report through CEDRI in the EPA's CDX, you may assert a claim of EPA system outage for failure to timely comply with the reporting requirement. To assert a claim of EPA system outage, you must meet the requirements outlined in paragraphs (g)(1) through (7) of this section.

(1) You must have been or will be precluded from accessing CEDRI and submitting a required report within the time prescribed due to an outage of either the EPA's CEDRI or CDX systems.

(2) The outage must have occurred within the period of time beginning five business days prior to the date that the submission is due.

(3) The outage may be planned or unplanned.

(4) You must submit notification to the Administrator in writing as soon as possible following the date you first knew, or through due diligence should have known, that the event may cause or has caused a delay in reporting.

(5) You must provide to the Administrator a written description identifying:

(i) The date(s) and time(s) when CDX or CEDRI was accessed and the system was unavailable;

(ii) A rationale for attributing the delay in reporting beyond the regulatory deadline to EPA system outage;

(iii) Measures taken or to be taken to minimize the delay in reporting; and

(iv) The date by which you propose to report, or if you have already met the reporting requirement at the time of the notification, the date you reported.

(6) The decision to accept the claim of EPA system outage and allow an extension to the reporting deadline is solely within the discretion of the Administrator.

(7) In any circumstance, the report must be submitted electronically as soon as possible after the outage is resolved.

(h) *Claims of force majeure*. If you are required to electronically submit a report through CEDRI in the EPA's CDX, you may assert a claim of *force majeure* for failure to timely comply with the reporting requirement. To assert a claim of *force majeure*, you must meet the requirements outlined in paragraphs (h)(1) through (5) of this section.

(1) You may submit a claim if a *force majeure* event is about to occur, occurs, or has occurred or there are lingering effects from such an event within the period of time beginning five business days prior to the date the submission is due. For the purposes of this section, a *force majeure* event is defined as an event that will be or has been caused by circumstances beyond the

control of the affected facility, its contractors, or any entity controlled by the affected facility that prevents you from complying with the requirement to submit a report electronically within the time period prescribed. Examples of such events are acts of nature (*e.g.,* hurricanes, earthquakes, or floods), acts of war or terrorism, or equipment failure or safety hazard beyond the control of the affected facility (*e.g.,* large scale power outage).

(2) You must submit notification to the Administrator in writing as soon as possible following the date you first knew, or through due diligence should have known, that the event may cause or has caused a delay in reporting.

(3) You must provide to the Administrator:

(i) A written description of the *force majeure* event;

(ii) A rationale for attributing the delay in reporting beyond the regulatory deadline to the *force majeure* event;

(iii) Measures taken or to be taken to minimize the delay in reporting; and

(iv) The date by which you propose to report, or if you have already met the reporting requirement at the time of the notification, the date you reported.

(4) The decision to accept the claim of *force majeure* and allow an extension to the reporting deadline is solely within the discretion of the Administrator.

(5) In any circumstance, the reporting must occur as soon as possible after the *force majeure* event occurs.

§63.1456 What records must I keep and how long must I keep my records?

(a) You must keep the records listed in paragraphs (a)(1) through (7) 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) Before **[INSERT DATE 180 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]**, ~~T~~the records in §63.6(e)(3)(iii) through (v) related to startup, shutdown, and malfunction. On or after **[INSERT DATE 180 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]**, you are not required to keep the records required in §63.6(e)(3)(iii) through (v) related to compliance with a startup, shutdown, and malfunction plan.

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

(4) For each monitoring system, you must keep the records specified in paragraphs (a)(4)(i) through (iv) of this section.

(i) Records described in §63.10(b)(2)(vi) through (xi).

(ii) Monitoring data recorded by the monitoring system during a performance evaluation as required in §63.6(h)(7)(i) and (ii).

(iii) Before **[INSERT DATE 180 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]**, ~~P~~previous (i.e., superseded) versions of the performance evaluation plan as required in §63.8(d)(3). On or after **[INSERT DATE 180 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]**, you must comply with the requirements in 40 CFR part 63.8(d)(1) and (2). The owner or operator shall keep the written procedures required in 40 CFR part 63.8(d)(1) and (2) 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 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).

(iv) Before **[INSERT DATE 180 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER],** ~~R~~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. On or after **[INSERT DATE 180 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER], f**or each failure to meet an applicable standard, you must record the date, time, and duration of the failure and a list of the affected source or equipment and actions taken to minimize emissions, an estimate of the quantity of each regulated pollutant emitted over the standard for which the source failed to meet the standard, and a description of the method used to estimate the emissions. Examples of such methods to estimate emissions include product-loss calculations, mass balance calculations, measurements, or engineering judgment based on known process parameters.

(5) For each performance test you conduct to demonstrate compliance with an opacity limit according to §63.1450(c), you must keep the records specified in paragraphs (a)(5)(i) through (ix) of this section.

(i) Dates and time intervals of all opacity observation period segments;

(ii) Description of overall smelter operating conditions during each observation period. Identify, if any, the smelter copper production process equipment that was out-of-service during the performance test and explain why this equipment was not in operation;

(iii) Name, affiliation, and copy of current visible emission reading certification for each visible emission observer participating in the performance test;

(iv) Name, title, and affiliation for each indoor process monitor participating in the performance test;

(v) Copies of all visible emission observer opacity field data sheets;

(vi) Copies of all indoor process monitor operating log sheets;

(vii) Copies of all data summary sheets used for data reduction;

(viii) Copy of calculation sheets of the average opacity value used to demonstrate compliance with the opacity limit; and

(ix) Documentation according to the requirements in §63.1450(c)(9)(iv) to support your selection of the site-specific capture system operating limits used for each batch copper converter capture system when blowing.

(6) For each baghouse subject to the operating limit in §63.1444(f) or §63.1446(c), you must keep the records specified in paragraphs (a)(6)(i) and (ii) of this section.

(i) Records of alarms for each bag leak detection system.

(ii) Description of the corrective actions taken following each bag leak detection alarm.

(7) For each control device other than a baghouse or venturi wet scrubber subject to site-specific operating limits in §63.1444(g) or §63.1446(f), you must keep documentation according to the requirements in §63.1450(a)(5)(iv) to support your selection of the site-specific operating limits for the control device.

(b) Your records must be in a form suitable and readily available for expeditious review, according to §63.10(b)(1).

(c) 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.

(d) 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.

§63.1457 What part of the general provisions apply to me?

Table 2 to this subpart shows which parts of the general provisions in §§63.1 through 63.15 apply to you.

§63.1458 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 40 CFR part 63, subpart E, the authorities listed 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 emission limitations and work practice standards in §§63.1444 through 63.1446 under §63.6(g).

(2) Approval of major alternatives to test methods under §63.7(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 an alternative to any electronic reporting to the EPA required by this subpart.

§63.1459 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:

Anode refining department means the area at a primary copper smelter in which anode copper refining operations are performed. Emission sources in the anode refining department include anode refining furnaces and utility vessels.

Bag leak detection system means a system that is capable of continuously monitoring relative particulate matter (dust) loadings in the exhaust of a baghouse in order 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, transmittance or other effect to continuously monitor relative particulate matter loadings.

Baghouse means a control device that collects particulate matter by filtering the gas stream through bags. A baghouse is also referred to as a "fabric filter."

Batch copper converter means a P~~i~~eirce-Smith converter or Hoboken converter in which copper matte is oxidized to form blister copper by a process that is performed in discrete batches using a sequence of charging, blowing, skimming, and pouring.

Blowing means the operating mode for a batch copper converter during which air or oxygen-enriched air is injected into the molten converter bath.

Bypass stack means a device used for discharging combustion gases to avoid severe damage to the air pollution control device or other equipment.

Capture system means the collection of components used to capture gases and fumes released from one or more emission points, and to convey the captured gases and fumes to a control device. A capture system may include, but is not limited to, the following components as applicable to a given capture system design: duct intake devices, hoods, enclosures, ductwork, dampers, manifolds, plenums, and fans.

Charging means the operating mode for a batch copper converter during which molten or solid material is added into the vessel.

New copper converter system means the copper matte is oxidized and forms copper blister by a process that is performed continuously. This system may include a flash smelting furnace, flash converting furnace, secondary gas system, a rotary dryer, anode area, matte grinding plant, hydrometallurgical plant and possibly an acid plant.

Control device means the air pollution control equipment used to collect particulate matter ~~emissions~~from a gas stream. ~~Examples of such equipment include, but are not limited to, a baghouse, an electrostatic precipitator, and a wet scrubber.~~

Converting vessel means a furnace, reactor, or other type of vessel in which copper matte is oxidized to form blister copper.

Copper concentrate dryer means a vessel in which copper concentrates are heated in the presence of air to reduce the moisture content of the material. Supplemental copper-bearing feed

materials and fluxes may be added or mixed with the copper concentrates fed to a copper concentrate dryer.

Copper concentrate feed means the mixture of copper concentrate, secondary copper-bearing materials, recycled slags and dusts, fluxes, and other materials blended together for feeding to the smelting vessel.

Copper converter department means the area at a primary copper smelter in which the copper converters are located. This could ~~be~~ include a batch copper converter or other type of copper converter, such as a continuous copper converter.

Copper matte means a material predominately composed of copper and iron sulfides produced by smelting copper ore concentrates.

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

(1) Fails to meet ~~A~~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 ~~A~~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 ~~A~~any emission limitation (including any operating limit) or work practice standard in this subpart during startup, shutdown, or malfunction, regardless whether or not such failure is permitted by this subpart.

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

Fugitive dust material means copper concentrate, dross, reverts, slag, speiss, or other solid copper-bearing materials.

Fugitive dust source means a stationary source of particulate matter emissions resulting from the handling, storage, transfer, or other management of fugitive dust materials where the source is not associated with a specific process, process vent, or stack. Examples of a fugitive dust source include, but are not limited to, on-site roadways used by trucks transporting copper concentrate, unloading of materials from trucks or railcars, outdoor material storage piles, and transfer of material to hoppers and bins.

Holding means the operating mode for a batch copper converter or a holding furnace associated with a smelting vessel~~furnace~~ during which the molten bath is maintained in the vessel but no blowing or smelting is performed nor is material added into or removed from the vessel.

~~*Holding* means the operating mode for a batch copper converter during which the molten bath is maintained in the vessel but no blowing is performed nor is material added into or removed from the vessel.~~

Opacity means the degree to which emissions reduce the transmission of light.

Particulate matter means any finely divided solid or liquid material, other than uncombined water, as measured by the specific reference method.

Pouring means the operating mode for a batch copper converter during which molten copper is removed from the vessel.

Primary copper smelter means any installation or any intermediate process engaged in the production of copper from copper sulfide ore concentrates through the use of pyrometallurgical techniques.

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

Roofline vents means an exhaust system designed to evacuate process fugitive emissions that collect in the roofline area of various process buildings (*e.g.*, smelting building roof vents, converter building roof vents, etc.).

Secondary gas system means a capture system that collects the gases and fumes released when removing and transferring molten materials from one or more vessels using tapping ports, launders, and other openings in the vessels. Examples of molten material include, but are not limited to: Copper matte, slag, and blister copper.

Skimming means the batch copper converter operating mode during which molten slag is removed from the vessel.

Slag cleaning vessel means a vessel that receives molten copper-bearing material and the predominant use of the vessel is to separate this material into molten copper matte and slag layers.

Smelting ~~furnace~~ vessel means a furnace, reactor, or other type of vessel in which copper ore concentrate and fluxes are smelted to form a molten mass of material containing copper matte and slag. Other copper-bearing materials may also be charged to the smelting furnace.

TEQ means the international method of expressing toxicity equivalents for dioxins/furans as defined in EPA/100/R-10/005, "Recommended Toxicity Equivalence Factors (TEFs) for Human Health Risk Assessments of 2, 3, 7, 8-Tetrachlorodibenzo-p-dioxin and Dioxin-Like

Compounds", December 2010 (incorporated by reference—see §63.14). The Toxic Equivalency 49 Factors (TEFs) used to determine the dioxin and furan TEQs are listed in Table 10 of 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 Clean Air Act.

Table 1 to Subpart QQQ of Part 63—Applicability of General Provisions to Subpart QQQ

As required in §63.1457, you must comply with the requirements of the NESHAP General Provisions (40 CFR part 63, subpart A) shown in the following table:

Citation	Subject	Applies to subpart QQQ	Explanation
§63.1	Applicability	Yes	
§63.2	Definitions	Yes	
§63.3	Units and Abbreviations	Yes	
§63.4	Prohibited Activities	Yes	
§63.5	Construction and Reconstruction	Yes	
§63.6(a)-(~~g~~d), (e)(iii), and (f)(2)-(f)(3), (g)	Compliance with Standards and Maintenance ~~requirements~~Requirements	Yes	
§63.6(e)(1)(i)	Operation and Maintenance Requirements	Yes before **[INSERT DATE 180 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]** No on or after **[INSERT DATE 180 DAYS AFTER DATE OF PUBLICATION IN THE**	General duty requirements to minimize emissions at all times are contained in 63.1447(a).

Citation	Subject	Applies to subpart QQQ	Explanation
		FEDERAL REGISTER].	
§63.6(e)(1)(ii)		Yes before **[INSERT DATE 180 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]** No on or after **[INSERT DATE 180 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].**	
§63.6(e)(2)	Reserved	No	
§63.6(e)(3)	Requirement to develop a startup, shutdown, and malfunction plan	Yes before **[INSERT DATE 180 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]** No on or after **[INSERT DATE 180 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].**	
§63.6(f)(1)	Compliance with nonopacity emission standards during periods of startup, shutdown, and malfunction	Yes before **[INSERT DATE 180 DAYS AFTER DATE OF**	

Citation	Subject	Applies to subpart QQQ	Explanation
		PUBLICATION IN THE FEDERAL REGISTER] No on or after **[INSERT DATE 180 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].**	
§63.6(h)	Determining compliance with Opacity and VE standards	No	Subpart QQQ specifies the requirements and test protocol used to determine compliance with the opacity limits.
§63.6(i)-(j)	Extension of Compliance and Presidential Compliance Exemption	Yes	
§63.7(a)(1)-(2)	Applicability and Performance Test Dates	No	Subpart QQQ specifies performance test applicability and dates.
§63.7(a)(3), (b)-(d), (f)-(h)	Performance Testing Requirements	Yes	
§63.7(e)(1)		Yes before **[INSERT DATE 180 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]** No on or after **[INSERT DATE 180 DAYS AFTER DATE OF**	

Citation	Subject	Applies to subpart QQQ	Explanation
		PUBLICATION IN THE FEDERAL REGISTER].	
§63.8 except for (a)(4), (c)(1)(i) and (iii), (c)(4), (d)(3), and (f)(6)	Monitoring Requirements	Yes	
§63.8(a)(4)	Additional Monitoring Requirements for Control devices in §63.11	No	Subpart QQ does not require flares.
§63.8(c)(1)(i) and (iii)	Operation and Maintenance of Continuous Monitoring Systems	Yes before **[INSERT DATE 180 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]** No on or after **[INSERT DATE 180 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].**	Cross references to the general duty and SSM plan requirements in those paragraphs are no longer necessary.
§63.8(c)(4)	Continuous Monitoring System Requirements	No	Subpart QQQ specifies requirements for operation of CMS.
§63.8(d)(3)	Quality Control Program	Yes before **[INSERT DATE 180 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]** No on or after **[INSERT DATE**	See 63.1456(a)(4)(iii).

Citation	Subject	Applies to subpart QQQ	Explanation
		180 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].	
§63.8(f)(6)	RATA Alternative	No	Subpart QQQ does not require continuous emission monitoring systems.
§63.9	Notification Requirements	Yes	
§63.9(g)(5)	DATA reduction	No	Subpart QQQ specifies data reduction requirements
§63.10 except for (b)(2)(i), (ii), (iv), (v), and (xiii), ~~and~~ (c)(7)-(8) and (15), and (d)(5)	Recordkeeping and reporting Requirements	Yes	
§63.10(b)(2)(i)	General Recordkeeping Requirements during Startup and Shutdown	Yes before **[INSERT DATE 180 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]** No on or after **[INSERT DATE 180 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].**	No longer necessary because the EPA is proposing that recordkeeping and reporting applicable to normal operations will apply to startup and shutdown.
§63.10(b)(2)(ii)		Yes before **[INSERT DATE 180 DAYS AFTER DATE OF**	See 63.1456(a)(4)(iv) for recordkeeping requirements for a

Citation	Subject	Applies to subpart QQQ	Explanation
		PUBLICATION IN THE FEDERAL REGISTER] No on or after **[INSERT DATE 180 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].**	deviation from a standard.
§63.10(b)(2)(iv)		Yes before **[INSERT DATE 180 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]** No on or after **[INSERT DATE 180 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].**	See 63.1456 for the recordkeeping requirements of actions taken to minimize emissions and record corrective actions.
§63.10(b)(2)(v)		Yes before **[INSERT DATE 180 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]** No on or after **[INSERT DATE 180 DAYS AFTER DATE**	Requirements to document that actions taken during SSM events are consistent with SSM plan are no longer required.

Citation	Subject	Applies to subpart QQQ	Explanation
		OF PUBLICATION IN THE FEDERAL REGISTER].	
§63.10(b)(2)(xiii)	CMS Records for RATA Alternative	No	Subpart QQQ does not require continuous emission monitoring systems.
§63.10(c)(7)-(8)	Records of Excess Emissions and Parameter Monitoring ~~Accedences~~ Exceedances for CMS	No	Subpart QQQ specifies record keeping requirements
§63.10(c)(15)		Yes before **[INSERT DATE 180 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]** No on or after **[INSERT DATE 180 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].**	This provision would be eliminated because it referenced the source's SSM plan, which is no longer required.
§63.10(d)(5)	Reporting Requirements	Yes before **[INSERT DATE 180 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]** No on or after **[INSERT DATE 180 DAYS AFTER DATE**	See 63.1456.

Citation	Subject	Applies to subpart QQQ	Explanation
		OF PUBLICATION IN THE FEDERAL REGISTER].	
§63.11	Control Device Requirements	No	Subpart QQQ does not require flares
§63.12	State Authority and Delegations	Yes	
§§63.13-63.15~~5~~6	Addresses, Incorporation by Reference, Availability of Information, Performance Track Provisions	Yes	

Table 2 to Subpart QQQ of Part 63—Emission Limits

As required in §63.1444(m), you must meet each emission limit in the following table that applies to you.

For…	You must meet the following emission limit
Each new and existing combination of stacks or other vents from the copper concentrate dryers, converting department, the anode refining department, and the smelting vessels	Benzene emissions must not exceed 1.7E-03 lb/ton concentrated ore fed
Each new and existing combination of stacks or other vents from the copper concentrate dryers, converting department, the anode refining department, and the smelting vessels	Toluene emissions must not exceed 8.4E-04 lb/ton concentrated ore fed
Each new and existing combination of stacks or other vents from the copper concentrate dryers, converting department, the anode refining department, and the smelting vessels	Chlorine emissions must not exceed 5.4E-03 lb/ton concentrated ore fed
Each new and existing combination of stacks or other vents from the copper concentrate dryers, converting department, the anode refining department, and the smelting vessels	Hydrogen chloride emissions must not exceed 1.5E-03 lb/ton concentrated ore fed
Each new and existing combination of stacks or other vents from the copper concentrate dryers, converting department, the anode refining department, and the smelting vessels	Polycyclic aromatic hydrocarbons (excluding naphthalene) emissions must not exceed 1.0E-04 lb/ton concentrated ore fed

Each new and existing combination of stacks or other vents from the copper concentrate dryers, converting department, the anode refining department, and the smelting vessels	Naphthalene emissions must not exceed 2.8E-04 lb/ton concentrated ore fed
Each new and existing combination of stacks or other vents from the copper concentrate dryers, converting department, the anode refining department, and the smelting vessels	Dioxins/Furans emissions must not exceed 6.0E+01 ng TEQ/Mg concentrated ore fed

[1] Determined using the toxic equivalency factors listed in Table 2 of Recommended Toxicity Equivalence Factors (TEFs) for Human Health Risk Assessments of 2, 3, 7, 8-Tetrachlorodibenzo-p-dioxin and Dioxin-Like Compounds.

Table 3 to Subpart QQQ of Part 63—1989 Toxic Equivalency Factors (TEFs)

Congener	TEF (Mammals)
2,3,7,8-Te CDD	1
1,2,3,7,8-Pe CDD	1
1,2,3,4,7,8-HxCDD	0.1
1,2,3,6,7,8-HxCDD	0.1
1,2,3,7,8,9-HxCDD	0.1
1,2,3,4,6,7,8-HpCDD	0.01
OCDD	0.0003
2,3,7,8-Te CDF	0.1
1,2,3,7,8-Pe CDF	0.03
2,3,4,7,8-Pe CDF	0.3
1,2,3,4,7,8-HxCDF	0.1
1,2,3,6,7,8-HxCDF	0.1
2,3,4,6,7,8-HxCDF	0.1
1,2,3,7,8,9-HxCDF	0.1
1,2,3,4,6,7,8-HpCDF	0.01
1,2,3,4,7,8,9-HpCDF	0.01
OCDF	0.0003

Figure 1 to Subpart QQQ of Part 63—Data Summary Sheet for Determination of Average Opacity

Clock time	Number of converters blowing	Converter aisle activity	Average opacity for 1-minute interval (percent)	Visible emissions interference observed during 1-minute interval? (yes or no)	Average opacity for 1-minute interval blowing without visible emission interferences (percent)