

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

SOURCE: 67 FR 40491, June 12, 2002, unless otherwise noted.

WHAT THIS SUBPART COVERS

§ 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, each slag cleaning vessel, each copper converter department, and the entire group of fugitive emission 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.

(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.

EMISSION LIMITATIONS AND WORK PRACTICE STANDARDS

§ 63.1444 What emissions limitations and work practice standards must I meet for my copper concentrate dryers, smelting furnaces, slag cleaning vessels, and copper converter 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 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 particulate matter in excess of 23 mg/dscm as measured using the test methods specified in § 63.1450(a).

(b) *Smelting furnaces.* For each smelting furnace, 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, 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 is generated when copper ore concentrates and fluxes are being smelted to form molten copper matte and slag layers.

(2) For each smelting furnace, you must control the process fugitive emissions released when tapping copper matte or slag from the smelting furnace 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, 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 particulate

matter in excess of 23 mg/dscm as measured using the test methods specified in § 63.1450(a).

(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 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 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 particulate matter in excess of 23 mg/dscm as measured using the test methods specified in § 63.1450(a).

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(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 (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 Pierce-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 (ii) of this section.

(i) The opacity of any visible emissions exiting the roof monitors 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 Pierce-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) You must not cause to be discharged to the atmosphere from any secondary capture system any gases that contain total particulate matter in excess of 23 mg/dscm as measured using the test methods specified in § 63.1450(a).

(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.

(f) *Baghouses.* For each baghouse applied to meet any total 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 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 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.

§ 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 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) 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).

(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 Adminis-

trator or delegated permitting authority designate to be included in your fugitive dust control plan.

(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 permitting authority under part 70 of this chapter. A copy of your fugitive dust control plan must be sent to the designated permitting authority on or before the compliance date for your primary copper smelter, as specified in § 63.1443.

§ 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 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 streams specified in paragraphs (a)(1) through (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 capture system that