Environmental Protection Agency

bed and outlet of fluidized bed incinerators; and of the drying, combustion, and cooling zones of electric incinerators averaged over each 1-hour incinerator operating period.

- (4) Rate of sludge charged to the incinerator averaged over each 1-hour incinerator operating period.
- (5) Incinerator fuel use averaged over each 8-hour incinerator operating period.
- (6) Moisture and volatile solids content of the daily grab sample of sludge charged to the incinerator.
- (c) The owner or operator of any sludge incinerator other than a multiple hearth, fluidized bed, or electric incinerator or any sludge incinerator equipped with a control device other than a wet scrubber shall include in the semi-annual report a record of control device operation measurements, as specified in the plan approved under § 60.153(e).

[53 FR 39417, Oct. 6, 1988]

§ 60.156 Delegation of authority.

- (a) In delegating implementation and enforcement authority to a State under section 111(c) of the Act, the authorities contained in paragraph (b) of this section shall be retained by the Administrator and not transferred to a State
- (b) Authorities which will not be delegated to States: §60.153(e).

[53 FR 39418, Oct. 6, 1988]

Subpart P—Standards of Performance for Primary Copper Smelters

Source: 41 FR 2338, Jan. 15, 1976, unless otherwise noted.

§ 60.160 Applicability and designation of affected facility.

- (a) The provisions of this subpart are applicable to the following affected facilities in primary copper smelters: Dryer, roaster, smelting furnace, and copper converter.
- (b) Any facility under paragraph (a) of this section that commences construction or modification after October

16, 1974, is subject to the requirements of this subpart.

[42 FR 37937, July 25, 1977]

§ 60.161 Definitions.

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

- (a) 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.
- (b) Dryer means any facility in which a copper sulfide ore concentrate charge is heated in the presence of air to eliminate a portion of the moisture from the charge, provided less than 5 percent of the sulfur contained in the charge is eliminated in the facility.
- (c) Roaster means any facility in which a copper sulfide ore concentrate charge is heated in the presence of air to eliminate a significant portion (5 percent or more) of the sulfur contained in the charge.
- (d) *Calcine* means the solid materials produced by a roaster.
- (e) Smelting means processing techniques for the melting of a copper sulfide ore concentrate or calcine charge leading to the formation of separate layers of molten slag, molten copper, and/or copper matte.
- (f) Smelting furnace means any vessel in which the smelting of copper sulfide ore concentrates or calcines is performed and in which the heat necessary for smelting is provided by an electric current, rapid oxidation of a portion of the sulfur contained in the concentrate as it passes through an oxidizing atmosphere, or the combustion of a fossil fuel.
- (g) Copper converter means any vessel to which copper matte is charged and oxidized to copper.
- (h) Sulfuric acid plant means any facility producing sulfuric acid by the contact process.
- (i) Fossil fuel means natural gas, petroleum, coal, and any form of solid, liquid, or gaseous fuel derived from such materials for the purpose of creating useful heat.
- (j) Reverberatory smelting furnace means any vessel in which the smelting

§ 60.162

of copper sulfide ore concentrates or calcines is performed and in which the heat necessary for smelting is provided primarily by combustion of a fossil fuel.

- (k) Total smelter charge means the weight (dry basis) of all copper sulfide ore concentrates processed at a primary copper smelter, plus the weight of all other solid materials introduced into the roasters and smelting furnaces at a primary copper smelter, except calcine, over a one-month period.
- (1) High level of volatile impurities means a total smelter charge containing more than 0.2 weight percent arsenic, 0.1 weight percent antimony, 4.5 weight percent lead or 5.5 weight percent zinc, on a dry basis.

§ 60.162 Standard for particulate matter.

(a) On and after the date on which the performance test required to be conducted by §60.8 is completed, no owner or operator subject to the provisions of this subpart shall cause to be discharged into the atmosphere from any dryer any gases which contain particulate matter in excess of 50 mg/dscm (0.022 gr/dscf).

§ 60.163 Standard for sulfur dioxide.

- (a) On and after the date on which the performance test required to be conducted by §60.8 is completed, no owner or operator subject to the provisions of this subpart shall cause to be discharged into the atmosphere from any roaster, smelting furnace, or copper converter any gases which contain sulfur dioxide in excess of 0.065 percent by volume, except as provided in paragraphs (b) and (c) of this section.
- (b) Reverberatory smelting furnaces shall be exempted from paragraph (a) of this section during periods when the total smelter charge at the primary copper smelter contains a high level of volatile impurities.
- (c) A change in the fuel combusted in a reverberatory smelting furnace shall not be considered a modification under this part.

§ 60.164 Standard for visible emissions.

(a) On and after the date on which the performance test required to be conducted by §60.8 is completed, no owner or operator subject to the provisions of this subpart shall cause to be discharged into the atmosphere from any dryer any visible emissions which exhibit greater than 20 percent opacity.

(b) On and after the date on which the performance test required to be conducted by §60.8 is completed, no owner or operator subject to the provisions of this subpart shall cause to be discharged into the atmosphere from any affected facility that uses a sulfuric acid plant to comply with the standard set forth in §60.163, any visible emissions which exhibit greater than 20 percent opacity.

§ 60.165 Monitoring of operations.

- (a) The owner or operator of any primary copper smelter subject to §60.163 (b) shall keep a monthly record of the total smelter charge and the weight percent (dry basis) of arsenic, antimony, lead and zinc contained in this charge. The analytical methods and procedures employed to determine the weight of the total smelter charge and the weight percent of arsenic, antimony, lead and zinc shall be approved by the Administrator and shall be accurate to within plus or minus ten percent.
- (b) The owner or operator of any primary copper smelter subject to the provisions of this subpart shall install and operate:
- (1) A continuous monitoring system to monitor and record the opacity of gases discharged into the atmosphere from any dryer. The span of this system shall be set at 80 to 100 percent opacity.
- (2) A continuous monitoring system to monitor and record sulfur dioxide emissions discharged into the atmosphere from any roaster, smelting furnace or copper converter subject to \$60.163 (a). The span of this system shall be set at a sulfur dioxide concentration of 0.20 percent by volume.
- (i) The continuous monitoring system performance evaluation required under §60.13(c) shall be completed prior to the initial performance test required under §60.8.
- (ii) For the purpose of the continuous monitoring system performance evaluation required under §60.13(c) the reference method referred to under the

Environmental Protection Agency

Relative Accuracy Test Procedure in Performance Specification 2 of appendix B to this part shall be Method 6. For the performance evaluation, each concentration measurement shall be of one hour duration. The pollutant gas used to prepare the calibration gas mixtures required under Performance Specification 2 of appendix B, and for calibration checks under §60.13 (d), shall be sulfur dioxide.

- (c) Six-hour average sulfur dioxide concentrations shall be calculated and recorded daily for the four consecutive 6-hour periods of each operating day. Each six-hour average shall be determined as the arithmetic mean of the appropriate six contiguous one-hour average sulfur dioxide concentrations provided by the continuous monitoring system installed under paragraph (b) of this section.
- (d) For the purpose of reports required under §60.7(c), periods of excess emissions that shall be reported are defined as follows:
- (1) Opacity. Any six-minute period during which the average opacity, as measured by the continuous monitoring system installed under paragraph (b) of this section, exceeds the standard under §60.164(a).
- (2) Sulfur dioxide. All six-hour periods during which the average emissions of sulfur dioxide, as measured by the continuous monitoring system installed under paragraph (b) of this section, exceed the level of the standard. The Administrator will not consider emissions in excess of the level of the standard for less than or equal to 1.5 percent of the six-hour periods during the quarter as indicative of a potential violation of §60.11(d) provided the affected facility, including air pollution control equipment, is maintained and operated in a manner consistent with good air pollution control practice for minimizing emissions during these periods. Emissions in excess of the level of the standard during periods of startup, shutdown, and malfunction are not to be included within the 1.5 percent.

[41 FR 2338, Jan. 15, 1976; 41 FR 8346, Feb. 26, 1976, as amended at 42 FR 57126, Nov. 1, 1977; 48 FR 23611, May 25, 1983; 54 FR 6668, Feb. 14, 1989; 65 FR 61756, Oct. 17, 2000]

§ 60.166 Test methods and procedures.

- (a) In conducting performance tests required in §60.8, the owner or operator shall use as reference methods and procedures the test methods in appendix A of this part or other methods and procedures as specified in this section, except as provided in §60.8(b).
- (b) The owner or operator shall determine compliance with the particulate matter, sulfur dioxide (SO_2) and visible emission standards in §§ 60.162, 60.163, and 60.164 as follows:
- (1) Method 5 shall be used to determine the particulate matter concentration. The sampling time and sample volume for each run shall be at least 60 minutes and 0.85 dscm (30 dscf).
- (2) The continuous monitoring system of $\S60.165(b)(2)$ shall be used to determine the SO_2 concentrations on a dry basis. The sampling time for each run shall be 6 hours, and the average SO_2 concentration shall be computed for the 6-hour period as in $\S60.165(c)$. The monitoring system drift during the run may not exceed 2 percent of the span value.
- (3) Method 9 and the procedures in §60.11 shall be used to determine opacity.

[54 FR 6668, Feb. 14, 1989]

Subpart Q—Standards of Performance for Primary Zinc Smelters

Source: 41 FR 2340, Jan. 15, 1976, unless otherwise noted.

§60.170 Applicability and designation of affected facility.

- (a) The provisions of this subpart are applicable to the following affected facilities in primary zinc smelters: roaster and sintering machine.
- (b) Any facility under paragraph (a) of this section that commences construction or modification after October 16, 1974, is subject to the requirements of this subpart.

[42 FR 37937, July 25, 1977]

§ 60.171 Definitions.

As used in this subpart, all terms not defined herein shall have the meaning