

2.13 Primary Copper Smelters

2.13.1 Applicability and Designation of Affected Facility

- (a) The provisions of this source category are applicable to the following affected facilities in primary copper smelters: dryers, 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 source category.

2.13.2 Test Methods and Procedures

- (a) In conducting performance tests required in Section 1.2, the owner or operator shall use as reference methods and procedures the test methods in Appendix A of this text or other methods and procedures as specified in this section, except as provided in §1.2(b).
- (b) The owner or operator shall determine compliance with the particulate matter, sulfur dioxide (SO₂) and visible emission standards 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 §2.13.3(b)(2) shall be used to determine the SO₂ concentrations on a dry basis. The sampling time for each run shall be 6 hours, and the average SO₂ concentration shall be computed for the 6-hour period as in §2.13.3(c). The monitoring system drift during the run may not exceed 2 percent of the span value.
 - (3) Method 9 and the procedures in Section 1.3 shall be used to determine opacity.

2.13.3 Monitoring of Operation

- (a) The owner or operator of any primary copper smelter subject to SO₂ standards 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 percent of arsenic, antimony, lead and zinc shall be approved by the Director 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 particulate standards. 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 Section 1.4 shall be completed prior to the initial performance test required under Section 1.2.
 - (ii) For the purpose of the continuous monitoring system performance evaluation required under Section 1.4, the reference method referred to under the Relative Accuracy Test Procedure in Performance Specification 2 of Appendix B to this text 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 paragraph 2.1, Performance Specification 2 of Appendix B, and for calibration checks under Section 1.4(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 Section 1.5, 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 visible emissions standards.
 - (2) Sulfur dioxide. All six-hour periods during which the average emissions of sulfur dioxide, as measured by the continuous monitoring system installed under SO₂ standards, exceed the level of the standard. The Director 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 the standard 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.