

Environmental Protection Agency

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consistent with good air pollution control practice for minimizing emissions of inorganic arsenic to the atmosphere to the maximum extent practicable. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Administrator, which may include, but is not limited to, monitoring results, review of operating and maintenance procedures, inspection of the source, and review of other records.

[51 FR 28025, Aug. 4, 1986, as amended at 65 FR 62157, Oct. 17, 2000]

§ 61.163 Emission monitoring.

(a) An owner or operator of a glass melting furnace subject to the emission limit in § 61.162(a)(2) or § 61.162(b)(2) shall:

(1) Install, calibrate, maintain, and operate a continuous monitoring system for the measurement of the opacity of emissions discharged into the atmosphere from the control device; and

(2) Install, calibrate, maintain, and operate a monitoring device for the continuous measurement of the temperature of the gas entering the control device.

(b) All continuous monitoring systems and monitoring devices shall be installed and operational prior to performance of an emission test required by § 61.164(a). Verification of operational status shall, at a minimum, consist of an evaluation of the monitoring system in accordance with the requirements and procedures contained in Performance Specification 1 of appendix B of 40 CFR part 60.

(c) During the emission test required in § 61.164(a) each owner or operator subject to paragraph (a) of this section shall:

(1) Conduct continuous opacity monitoring from the beginning of the first test run until the completion of the third test run. Process and control equipment shall be operated in a manner that will minimize opacity of emissions, subject to the Administrator's approval.

(2) Calculate 6-minute opacity averages from 24 or more data points equally spaced over each 6-minute period during the test runs.

(3) Determine, based on the 6-minute opacity averages, the opacity value corresponding to the 99 percent upper confidence level of a normal or log-normal (whichever the owner or operator determines is more representative) distribution of the average opacity values.

(4) Conduct continuous monitoring of the temperature of the gas entering the control device from the beginning of the first test run until completion of the third test run.

(5) Calculate 15-minute averages of the temperature of the gas entering the control device during each test run.

(d) An owner or operator may re-determine the values described in paragraph (c) of this section during any emission test that demonstrates compliance with the emission limits in § 61.162(a)(2) or § 61.162(b)(2).

(e) The requirements of § 60.13(d) and § 60.13(f) shall apply to an owner or operator subject to paragraph (a) of this section.

(f) Except for system breakdowns, repairs, calibration checks, and zero and span adjustments required under § 60.13(d), all continuous monitoring systems shall be in continuous operation and shall meet minimum frequency of operation requirements by completing a minimum of one cycle of sampling and analyzing for each successive 10-second period and one cycle of data recording for each successive 6-minute period.

(g) An owner or operator subject to paragraph (a) of this section shall:

(1) Reduce all opacity data to 6-minute averages. Six-minute averages shall be calculated from 24 or more data points equally spaced over each 6-minute period. Data recorded during periods of monitoring system breakdowns, repairs, calibration checks, and zero and span adjustments shall not be included in the data averages calculated under this paragraph, and

(2) Calculate 15-minute averages of the temperature of the gas entering the control device for each 15-minute operating period.

(h) After receipt and consideration of written application, the Administrator may approve alternative monitoring systems for the measurement of one or more process or operating parameters that is or are demonstrated to enable

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accurate and representative monitoring of a properly operating control device. Upon approval of an alternative monitoring system for an affected source, the Administrator will specify requirements to replace the requirements of paragraphs (a)–(g) of this section for that system.

[51 FR 28025, Aug. 4, 1986, as amended at 64 FR 7467, Feb. 12, 1999]

§ 61.164 Test methods and procedures.

(a) To demonstrate compliance with § 61.162, the owner or operator shall conduct emission tests, reduce test data, and follow the procedures specified in this section unless the Administrator:

- (1) Specifies or approves, in specific cases, the use of a reference method with minor changes in methodology;
 - (2) Approves the use of an equivalent method;
 - (3) Approves the use of an alternative method the results of which he has determined to be adequate for indicating whether a specific source is in compliance; or
 - (4) Waives the requirement for emission tests as provided under § 61.13.
- (b) Unless a waiver of emission testing is obtained, the owner or operator

shall conduct emission tests required by this section:

- (1) No later than 90 days after the effective date of this subpart for a source that has an initial startup date preceding the effective date; or
- (2) No later than 90 days after startup for a source that has an initial startup date after the effective date.
- (3) At such other times as may be required by the Administrator under section 114 of the Act.
- (4) While the source is operating under such conditions as the Administrator may specify, based on representative performance of the source.

(c) To demonstrate compliance with § 61.162(a)(1) when less than 8.0 Mg (8.8 ton) per year of elemental arsenic is added to any existing glass melting furnace, or to demonstrate compliance with § 61.162(b)(1) when less than 1.0 Mg (1.1 ton) per year of elemental arsenic is added to any new or modified glass melting furnace, an owner or operator shall:

- (1) Derive a theoretical uncontrolled arsenic emission factor (T), based on material balance calculations for each arsenic-containing glass type (i) produced during the 12-month period, as follows:

$$T_i = (A_{bi} \times W_{bi}) + (A_{ci} \times W_{ci}) - B_{gi}$$

Where:

- T_i = The theoretical uncontrolled arsenic emission factor for each glass type (i), g/kg (lb/ton).
- A_{bi} = Fraction by weight of elemental arsenic in the fresh batch for each glass type (i).
- W_{bi} = Weight of fresh batch melted per unit weight of glass produced for each glass type (i), g/kg (lb/ton).
- A_{ci} = Fraction by weight of elemental arsenic in cullet for each glass type (i).

- W_{ci} = Weight of cullet melted per unit weight of glass produced for each glass type (i), g/kg (lb/ton).
- B_{gi} = Weight of elemental arsenic per unit weight of glass produced for each glass type (i), g/kg (lb/ton).

- (2) Estimate theoretical uncontrolled arsenic emissions for the 12-month period for each arsenic-containing glass type as follows:

$$Y_i = \frac{T_i G_i}{K}$$

Where:

- Y_i = Theoretical uncontrolled arsenic emission estimate for the 12-month period for each glass type, Mg/year (ton/year).