4.B.2. The waste generator is responsible for ensuring that a copy of the WSR is delivered to the disposal site along with the waste shipment. If a copy of the WSR signed by the disposal site operator is not returned to the waste generator within 35 days, the waste generator must contact the transporter and/or the disposal site to determine the status of the waste shipment. 40 CFR 61.150(d)(3). If the signed WSR is not received within 45 days, the waste generator must report, in writing, to the responsible NESHAP program agency and send along a copy of the WSR. 40 CFR 61.150(d)(4). Copies of WSRs, including those signed by the disposal site operator, must be retained for at least 2 years. 40 CFR 61.150(d)(5).

V. Training

5.1. For those roof removals that are subject to the NESHAP, at least one on-site supervisor trained in the provisions of the NESHAP must be present during the removal of the asbestos roofing material. 40 CFR 61.145(c)(8). In EPA's view, this person can be a job foreman, a hired consultant, or someone who can represent the building owner or contractor responsible for the removal. In addition to the initial training requirement, a refresher training course is required every 2 years. The NESHAP training requirements became effective on November 20, 1991.

5.2. Asbestos training courses developed specifically to address compliance with the NESHAP in roofing work, as well as courses developed for other purposes can satisfy this requirement of the NESHAP, as long as the course covers the areas specified in the regulation. EPA believes that Asbestos Hazard Emergency Response Act (AHERA) training courses will, for example, satisfy the NESHAP training requirements. However, nothing in this interpretive rule or in the NESHAP shall be deemed to require that roofing contractors or roofing workers performing operations covered by the NESHAP must be trained or accredited under AHERA, as amended by the Asbestos School Hazard Abatement Reauthorization Act (ASHARA). Likewise, state or local authorities may independently impose additional training, licensing, or accreditation requirements on roofing contractors performing operations covered by the NESHAP, but such additional training, licensing or accreditation is not called for by this interpretive rule or the federal NESHAP.

5.3. For removal of Category I asbestos containing roofing material where RB roof cutters or equipment that similarly damages the asbestos-containing roofing material are used, the NESHAP training requirements (§61.145(c)(8)) apply as discussed in Section I above. It is EPA's intention that removal of Category I asbestos-containing roofing material using hatchets, axes, knives, and/or the use of spud bars, pry bars and shovels to lift the roofing material, or similar removal methods that slice, punch, or shear the roof membrane are not subject to the training requirements, since these methods do not cause the roof removal to be subject to the NESHAP. Likewise, it is EPA's intention that roof removal operations involving Category II nonfriable ACM are not subject to the training requirements where such operations are not subject to the NESHAP as discussed in section I above.

[59 FR 31158, June 17, 1994, as amended at 60 FR 31920, June 19, 1995]

Subpart N—National Emission Standard for Inorganic Arsenic Emissions From Glass Manufacturing Plants

SOURCE: 51 FR 28025, Aug. 4, 1986, unless otherwise noted.

§ 61.160 Applicability and designation of source.

(a) The source to which this subpart applies is each glass melting furnace that uses commercial arsenic as a raw material. This subpart does not apply to pot furnaces.

(b) Rebricking is not considered construction or modification for the purposes of §61.05(a).

§ 61.161 Definitions.

The terms used in this subpart are defined in the Clean Air Act, in §61.02, or in this section as follows:

Arsenic-containing glass type means any glass that is distinguished from other glass solely by the weight percent of arsenic added as a raw material and by the weight percent of arsenic in the glass produced. Any two or more glasses that have the same weight percent of arsenic in the raw materials as well as in the glass produced shall be considered to belong to one arsenic-containing glass type, without regard to the recipe used or any other characteristics of the glass or the method of production.

By-pass the control device means to operate the glass melting furnace without operating the control device to which that furnace's emissions are directed routinely.

Commercial arsenic means any form of arsenic that is produced by extraction

from any arsenic-containing substance and is intended for sale or for intentional use in a manufacturing process. Arsenic that is a naturally occurring trace constituent of another substance is not considered ''commercial arsenic.''

Cullet means waste glass recycled to a glass melting furnace.

Glass melting furnace means a unit comprising a refractory vessel in which raw materials are charged, melted at high temperature, refined, and conditioned to produce molten glass. The unit includes foundations, superstructure and retaining walls, raw material charger systems, heat exchangers, melter cooling system, exhaust system, refractory brick work, fuel supply and electrical boosting equipment, integral control systems and instrumentation, and appendages for conditioning and distributing molten glass to forming apparatuses. The forming apparatuses, including the float bath used in flat glass manufacturing, are not considered part of the glass melting furnace.

Glass produced means the glass pulled from the glass melting furnace.

Inorganic arsenic means the oxides and other noncarbon compounds of the element arsenic included in particulate matter, vapors, and aerosols.

Malfunction means any sudden failure of air pollution control equipment or process equipment or of a process to operate in a normal or usual manner so that emissions of arsenic are increased.

Pot furnace means a glass melting furnace that contains one or more refractory vessels in which glass is melted by indirect heating. The openings of the vessels are in the outside wall of the furnace and are covered with refractory stoppers during melting.

Rebricking means cold replacement of damaged or worn refractory parts of the glass melting furnace. Rebricking includes replacement of the refractories comprising the bottom, sidewalls, or roof of the melting vessel; replacement of refractory work in the heat exchanger; and replacement of refractory portions of the glass conditioning and distribution system.

Shutdown means the cessation of operation of an affected source for any purpose.

Theoretical arsenic emissions factor means the amount of inorganic arsenic, expressed in grams per kilogram of glass produced, as determined based on a material balance.

Uncontrolled total arsenic emissions means the total inorganic arsenic in the glass melting furnace exhaust gas preceding any add-on emission control device.

[51 FR 28025, Aug. 4, 1986; 51 FR 35355, Oct. 3, 1986]

§ 61.162 Emission limits.

(a) The owner or operator of an existing glass melting furnace subject to the provisions of this subpart shall comply with either paragraph (a)(1) or (a)(2) of this section; except as provided in paragraph (c) of this section.

(1) Uncontrolled total arsenic emissions from the glass melting furnace shall be less than 2.5 Mg (2.7 ton) per year, or

(2) Total arsenic emissions from the glass melting furnace shall be conveyed to a control device and reduced by at least 85 percent.

(b) The owner or operator of a new or modified glass melting furnace subject to the provisions of this subpart shall comply with either paragraph (b)(1) or (b)(2) of this section, except as provided in paragraph (c) of this section.

(1) Uncontrolled total arsenic emissions from the glass melting furnace shall be less than 0.4 Mg (0.44 ton) per year, or

(2) Total arsenic emissions from the glass melting furnace shall be conveyed to a control device and reduced by at least 85 percent.

(c) An owner or operator of a source subject to the requirements of this section may, after approval by the Administrator, bypass the control device to which arsenic emissions from the furnace are directed for a limited period of time for designated purposes such as maintenance of the control device, as specified in § 61.165(e).

(d) At all times, including periods of startup, shutdown, and malfunction, the owner or operator of a glass melting furnace subject to the provisions of this subpart shall operate and maintain the furnace and associated air pollution control equipment in a manner

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 redetermine 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

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:

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

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).

T_i = Theoretical uncontrolled arsenic emission factor for each type of glass (i) produced during the 12-month period as calculated in paragraph (c)(1) of this section, g/kg (lb/ton).

G_i = Quantity of each arsenic-containing glass type (i) produced during the 12-month period, kg/yr (ton/yr).

K = conversion factor for unit consistency, 10^6 g/Mg (2,000 lb/ton).

(3) Estimate the total theoretical uncontrolled arsenic emissions for the 12-month period by finding the sum of the values calculated for Y_i in paragraph (c)(2) of this section.

(4) If the value determined in paragraph (c)(3) of this section is equal to or greater than the applicable limit in §61.162(a)(1) or (b)(1), conduct the emission testing and calculations described in paragraphs (d)(1) through (d)(5) of this section. If the value is less than the applicable limit, the source is in compliance and no emission testing or additional calculations are required.

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

(1) Estimate the theoretical uncontrolled arsenic emissions for each glass type for the 12-month period by performing the calculations described in paragraphs (c)(1) and (c)(2) of this section.

(2) Conduct emission testing to determine the actual uncontrolled arsenic emission rate during production of the arsenic-containing glass type with the highest theoretical uncontrolled arsenic emissions as calculated under paragraph (d)(1) of this section. The owner or operator shall use the following test methods and procedures:

(i) Use Method 108 in appendix B to this part or Method 29 in appendix A to part 60 for determining the arsenic emission rate, g/hr (lb/hr). The emission rate shall equal the arithmetic mean of the results of three 60-minute test runs.

(ii) Use the following methods in appendix A to 40 CFR part 60:

(A) Method 1 for sample and velocity traverse.

(B) Method 2 for velocity and volumetric flowrate.

(C) Method 3 for gas analysis.

(D) For sources equipped with positive pressure fabric filters, use Section 8.0 of Method 5D to determine a suitable sampling location and procedure.

(3) Determine the actual uncontrolled arsenic emission factor (R_a) as follows:

$$R_a = E_a \div P$$

Where:

R_a = Actual uncontrolled arsenic emission factor, g/kg (lb/ton).

E_a = Actual uncontrolled arsenic emission rate from paragraph (d)(2) of this section, g/hr (lb/hr).

P = Rate of glass production, kg/hr (ton/hr), determined by dividing the weight of glass pulled from the furnace during the emission test by the number of hours taken to perform the test under paragraph (d)(2) of this section.

(4) Calculate a correction factor to relate the theoretical and the actual uncontrolled arsenic emission factors as follows:

$$F = R_a \div T_i$$

Where:

F = the correction factor.

R_a = Actual uncontrolled arsenic emission factor, determined in paragraph (d)(3) of this section, g/kg (lb/ton).

T_i = Theoretical uncontrolled arsenic emission factor, g/kg (lb/ton), determined in paragraph (c)(1) of this section for the same glass type for which R_a was determined.

(5) Determine the uncontrolled arsenic emission rate for the 12-month period, as follows:

$$U = \frac{\sum_{i=1}^{n} (T_i \times F \times G_i)}{K}$$

Where:

U = Uncontrolled arsenic emission rate for the 12-month period, Mg/yr (ton/yr).

T_i = Theoretical uncontrolled arsenic emission factor for each type of glass (i) produced during the 12-month period as calculated in paragraph (c)(1) of this section, g/kg (lb/ton).

F = The correction factor calculated in paragraph (d)(4) of this section.

G_i = Quantity of each arsenic-containing glass type (i) produced during the 12-month period, kg/yr (ton/yr).
n = Number of arsenic-containing glass types produced during the 12-month period.
K = Conversion factor for unit consistency, 10^6 g/Mg (2,000 lb/ton).

(6) If the value determined in paragraph (d)(5) of this section is less than the applicable limit in §61.162(a)(1) or (b)(1), the source is in compliance.

(e) To demonstrate compliance with §61.162(a)(2) or (b)(2), an owner or operator shall:

(1) Conduct emission testing to determine the percent reduction of inorganic arsenic emissions being achieved by the control device, using the following test methods and procedures:

(i) Use Method 108 in appendix B to this part or Method 29 in appendix A to part 60 to determine the concentration of arsenic in the gas streams entering and exiting the control device. Conduct three 60-minute test runs, each consisting of simultaneous testing of the inlet and outlet gas streams. The gas streams shall contain all the gas exhausted from the glass melting furnace.

(ii) Use the following methods in appendix A to 40 CFR part 60:

(A) Method 1 for sample and velocity traverses.

(B) Method 2 for velocity and volumetric flowrate.

(C) Method 3 for gas analysis.

(D) For sources equipped with positive pressure fabric filters, use Section 8.0 of Method 5D to determine a suitable sampling location and procedure.

(2) Calculate the percent emission reduction for each run as follows:

$$D = \frac{(C_b - C_a)\, x\, 100}{C_b}$$

Where:

D = the percent emission reduction.
C_b = the arsenic concentration of the stack gas entering the control device, as measured by Method 108 or Method 29.
C_a = the arsenic concentration of the stack gas exiting the control device, as measured by Method 108 or Method 29.

(3) Determine the average percent reduction of arsenic by calculating the arithmetic mean of the results for the three runs. If it is at least 85 percent, the source is in compliance.

[51 FR 28025, Aug. 4, 1986; 51 FR 35355, Oct. 3, 1986, as amended at 55 FR 22027, May 31, 1990; 65 FR 62157, Oct. 17, 2000; 79 FR 11275, Feb. 27, 2014]

§ 61.165 Reporting and recordkeeping requirements.

(a) Each owner or operator of a source subject to the requirements of §61.162 shall maintain at the source for a period of at least 2 years and make available to the Administrator upon request a file of the following records:

(1) All measurements, including continuous monitoring for measurement of opacity, and temperature of gas entering a control device;

(2) Records of emission test data and all calculations used to produce the required reports of emission estimates to demonstrate compliance with §61.162;

(3) All continous monitoring system performance evaluations, including calibration checks and adjustments;

(4) The occurrence and duration of all startups, shutdowns, and malfunctions of the furnace;

(5) All malfunctions of the air pollution control system;

(6) All periods during which any continuous monitoring system or monitoring device is inoperative;

(7) All maintenance and repairs for each air pollution control system, continuous monitoring system, or monitoring device;

(b) Each owner or operator who is given approval by the Administrator to bypass a control device under paragraph (e) of this section shall maintain at the source for a period of at least 2 years and make available to the Administrator upon request a file of the following records:

(1) The dates the control device is bypassed; and

(2) Steps taken to minimize arsenic emissions during the period the control device was bypassed.

(c) Each owner or operator of a source subject to the emission limit in §61.162(a)(1) or (b)(1) shall determine and record at the end of every 6 months the uncontrolled arsenic emission rate for the preceding and forthcoming 12-month periods. The determinations shall:

(1) Be made by following the procedures in §61.164(c)(1), (c)(2), and (c)(3); or in §61.164(d)(5), whichever is applicable; and

(2) Take into account changes in production rates, types of glass produced, and other factors that would affect the uncontrolled arsenic emission rate.

(d) Each owner or operator of a source subject to the provisions of this subpart shall:

(1) Provide the Administrator 30 days prior notice of any emission test required in §61.164 to afford the Administrator the opportunity to have an observer present; and

(2) Submit to the Administrator a written report of the results of the emission test and associated calculations required in §61.164(d) or (e), as applicable, within 60 days after conducting the test.

(3) Submit to the Administrator a written report of the arsenic emission estimates calculated under §61.164(c):

(i) Within 45 days after the effective date of this subpart for a source that has an initial startup date preceding the effective date; or

(ii) Within 45 days after startup for a source that has an initial startup date after the effective date.

(4) Submit to the Adminstrator a written report of the uncontrolled arsenic emission rates determined in accordance with paragraph (c) of this section, if:

(i) The emission rate for the preceding 12-month period (or preceding 6-month period for the first 6-month determination) exceeded the applicable limit in §61.162(a)(1) or (b)(1).

(ii) The emission rate for the forthcoming 12-month period will exceed the applicable limit in §61.162(a)(1) or (b)(1). In this case, the owner or operator shall also notify the Administrator of the anticipated date of the emission test to demonstrate compliance with the applicable limit in §61.162(a)(2) or (b)(2).

(5) Ensure that the reports required in paragraph (d)(4) of this section are postmarked by the tenth day following the end of the 6-month reporting period.

(e) To obtain approval to bypass a control device, as provided in §61.162(c), an owner or operator of a source subject to this subpart may make written application to the Administrator. Each application for such a waiver shall be submitted to the Administrator no later than 60 days before the bypass period would begin and shall include:

(1) Name and address of the owner or operator;

(2) Location of the source;

(3) A brief description of the nature, size, design, and method of operation of the source;

(4) The reason it is necessary to bypass the control device;

(5) The length of time it will be necessary to by-pass the control device;

(6) Steps that will be taken to minimize arsenic emissions during the period the control device will be bypassed.

(7) The quantity of emissions that would be released while the control device is by-passed if no steps were taken to minimize emissions;

(8) The expected reduction in emissions during the by-pass period due to the steps taken to minimize emissions during this period; and

(9) The type of glass to be produced during the bypass period, and, if applicable, an explanation of why non-arsenic or lower-arsenic-containing glass cannot be melted in the furnace during the bypass period.

(f) Each owner or operator required to install and operate a continuous opacity monitoring system under §61.163 shall:

(1) Submit a written report to the Administrator of the results of the continuous monitoring system evaluation required under §61.163(b) within 60 days after conducting the evaluation.

(2) Submit a written report to the Administrator every 6 months if excess opacity occurred during the preceding 6-month period. For purposes of this paragraph, an occurrence of excess

opacity is any 6-minute period during which the average opacity, as measured by the continuous monitoring system, exceeds the opacity level determined under § 61.163(c)(3) or the opacity level redetermined under § 61.163(d).

(3) Ensure that any semiannual report of excess opacity required by paragraph (f)(2) of this section is postmarked by the thirtieth day following the end of the 6-month period and includes the following information:

(i) The magnitude of excess opacity, any conversion factor(s) used, and the date and time of commencement and completion of each occurrence of excess opacity.

(ii) Specific identification of each occurrence of excess opacity that occurs during startups, shutdowns, and malfunctions of the source.

(iii) The date and time identifying each period during which the continuous monitoring system was inoperative, except for zero and span checks, and the nature of the system repairs or adjustments.

[51 FR 28025, Aug. 4, 1986, as amended at 65 FR 62158, Oct. 17, 2000]

Subpart O—National Emission Standard for Inorganic Arsenic Emissions From Primary Copper Smelters

SOURCE: 51 FR 28029, Aug. 4, 1986, unless otherwise noted.

§ 61.170 Applicability and designation of source.

The provisions of this subpart are applicable to each copper converter at any new or existing primary copper smelter, except as noted in § 61.172(a).

§ 61.171 Definitions.

All terms used in this subpart shall have the meanings given to them in the Act, in subpart A of part 61, and in this section as follows:

Blowing means the injection of air or oxygen-enriched air into a molten converter bath.

Charging means the addition of a molten or solid material to a copper converter.

Control device means the air pollution control equipment used to collect particulate matter emissions.

Converter arsenic charging rate means the hourly rate at which arsenic is charged to the copper converters in the copper converter department based on the arsenic content of the copper matte and of any lead matte that is charged to the copper converters.

Copper converter means any vessel in which copper matte is charged and is oxidized to copper.

Copper converter department means all copper converters at a primary copper smelter.

Copper matte means any molten solution of copper and iron sulfides produced by smelting copper sulfide ore concentrates or calcines.

Holding of a copper converter means suspending blowing operations while maintaining in a heated state the molten bath in the copper converter.

Inorganic arsenic means the oxides and other noncarbon compounds of the element arsenic included in particulate matter, vapors, and aerosols.

Lead matte means any molten solution of copper and other metal sulfides produced by reduction of sinter product from the oxidation of lead sulfide ore concentrates.

Malfunction means any sudden failure of air pollution control equipment or process equipment or of a process to operate in a normal or usual manner so that emissions of inorganic arsenic are increased.

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 specified reference method.

Pouring means the removal of blister copper from the copper converter bath.

Primary copper smelter means any installation or intermediate process engaged in the production of copper from copper-bearing materials through the use of pyrometallurgical techniques.

Primary emission control system means the hoods, ducts, and control devices used to capture, convey, and collect process emissions.

Process emissions means inorganic arsenic emissions from copper converters