

smelting furnace. Materials storage and handling area does not include areas used exclusively for storage of blast furnace slag.

*Partial enclosure* means a structure comprised of walls or partitions on at least three sides or three-quarters of the perimeter surrounding stored materials or process equipment to prevent the entrainment of particulate matter into the air.

*Pavement cleaning* means the use of vacuum equipment, water sprays, or a combination thereof to remove dust or other accumulated material from the paved areas of a secondary lead smelter.

*Plant roadway* means any area of a secondary lead smelter that is subject to vehicle traffic, including traffic by fork lifts, front-end loaders, or vehicles carrying whole batteries or cast lead ingots. Excluded from this definition are employee and visitor parking areas, provided they are not subject to traffic by vehicles carrying lead-bearing materials.

*Pressurized dryer breaching seal* means a seal system connecting the dryer transition pieces which is maintained at a higher pressure than the inside of the dryer.

*Process fugitive emission source* means a source of hazardous air pollutant emissions at a secondary lead smelter that is associated with lead smelting or refining, but is not the primary exhaust stream from a smelting furnace, and is not a fugitive dust source. Process fugitive sources include, but are not limited to, smelting furnace charging points, smelting furnace lead and slag taps, refining kettles, agglomerating furnaces, and drying kiln transition pieces.

*Refining kettle* means an open-top vessel that is constructed of cast iron or steel and is indirectly heated from below and contains molten lead for the purpose of refining and alloying the lead. Included are pot furnaces, receiving kettles, and holding kettles.

*Reverberatory furnace* means a refractory-lined furnace that uses one or more flames to heat the walls and roof of the furnace and lead-bearing scrap to such a temperature (greater than 980 °C) that lead compounds are chemically reduced to elemental lead metal.

*Rotary furnace* (also known as a rotary reverberatory furnace) means a furnace consisting of a refractory-lined chamber that rotates about a horizontal axis and that uses one or more flames to heat the walls of the furnace and lead-bearing scrap to such a temperature (greater than 980 °C) that lead compounds are chemically reduced to elemental lead metal.

*Secondary lead smelter* means any facility at which lead-bearing scrap material, primarily, but not limited to, lead-acid batteries, is recycled into elemental lead or lead alloys by smelting.

*Smelting* means the chemical reduction of lead compounds to elemental lead or lead alloys through processing in high-temperature (greater than 980 °C) furnaces including, but not limited to, blast furnaces, reverberatory furnaces, rotary furnaces, and electric furnaces.

*Total enclosure* means a roofed and walled structure with limited openings to allow access and egress for people and vehicles that meets the requirements of 40 CFR 265.1101(a)(1), (a)(2)(i), and (c)(1)(i).

*Vehicle wash* means a device for removing dust and other accumulated material from the wheels, body, and underside of a vehicle to prevent the inadvertent transfer of lead contaminated material to another area of a secondary lead smelter or to public roadways.

*Wet suppression* means the use of water, water combined with a chemical surfactant, or a chemical binding agent to prevent the entrainment of dust into the air from fugitive dust sources.

[62 FR 32216, June 13, 1997, as amended at 63 FR 45011, Aug. 24, 1998]

#### § 63.543 Standards for process sources.

(a) No owner or operator of a secondary lead smelter shall discharge or cause to be discharged into the atmosphere from any existing, new, or reconstructed blast, reverberatory, rotary, or electric smelting furnace any gases that contain lead compounds in excess of 2.0 milligrams of lead per dry standard cubic meter (0.00087 grains of lead per dry standard cubic foot).

(b) [Reserved]

(c) No owner or operator of a secondary lead smelter with a collocated

blast furnace and reverberatory furnace shall discharge or cause to be discharged into the atmosphere from any existing, new, or reconstructed blast furnace or reverberatory furnace any gases that contain total hydrocarbons in excess of 20 parts per million by volume, expressed as propane corrected to 4 percent carbon dioxide, except as allowed under Paragraphs (c)(1) and (c)(2) of this section.

(1) No owner or operator of a secondary lead smelter with a collocated blast furnace and reverberatory furnace shall discharge or cause to be discharged into the atmosphere from any existing blast furnace any gases that contain total hydrocarbons in excess of 360 parts per million by volume, expressed as propane corrected to 4 percent carbon dioxide, during periods when the reverberatory furnace is not operating.

(2) No owner or operator of a secondary lead smelter with a collocated blast furnace and reverberatory furnace shall discharge or cause to be discharged into the atmosphere from any blast furnace that commences construction or reconstruction after June 9, 1994, any gases that contain total hydrocarbons in excess of 70 parts per million by volume, expressed as propane corrected to 4 percent carbon dioxide, during periods when the reverberatory furnace is not operating.

(d) No owner or operator of a secondary lead smelter with only blast furnaces shall discharge or cause to be discharged into the atmosphere from any existing blast furnace any gases that contain total hydrocarbons in excess of 360 parts per million by volume, expressed as propane corrected to 4 percent carbon dioxide.

(e) No owner or operator of a secondary lead smelter with only blast furnaces shall discharge or cause to be discharged into the atmosphere from any blast furnace that commences construction or reconstruction after June 9, 1994, any gases that contain total hy-

drocarbons in excess of 70 parts per million by volume, expressed as propane corrected to 4 percent carbon dioxide.

(f) If the owner or operator of a blast furnace or collocated blast furnace and reverberatory furnace combines the blast furnace charging process fugitive emissions with the blast furnace process emissions and discharges them to the atmosphere through a common emission point, then compliance with the applicable total hydrocarbon concentration limit under paragraph (c) of this section shall be determined downstream from the point at which the two emission streams are combined.

(g) If the owner or operator of a blast furnace or a collocated blast furnace and reverberatory furnace does not combine the blast furnace charging process fugitive emissions with the blast furnace process emissions and discharges such emissions to the atmosphere through separate emission points, then exhaust shall not contain total hydrocarbons in excess of 20 parts per million by volume, expressed as propane.

(h) Except as provided in paragraph (i) of this section, following the initial test to demonstrate compliance with paragraph (a) of this section, the owner or operator of a secondary lead smelter shall conduct a compliance test for lead compounds on an annual basis (no later than 12 calendar months following the previous compliance test).

(i) If a compliance test demonstrates a source emitted lead compounds at 1.0 milligram of lead per dry standard cubic meter (0.00044 grains of lead per dry standard cubic foot) or less during the time of the compliance test, the owner or operator of a secondary lead smelter shall be allowed up to 24 calendar months from the previous compliance test to conduct the next annual compliance test for lead compounds.

(j) The standards for process sources are summarized in table 2.

TABLE 2—SUMMARY OF STANDARDS FOR PROCESS SOURCES

Furnace configuration	Lead compounds (milligrams per dry standard cubic meter)	Total hydrocarbons	Citation
Collocated blast furnace and reverberatory furnace:			
When both furnaces operating.	2.0	20 parts per million by volume <sup>1</sup> .....	§ 63.543(a),(c).
When reverberatory furnace not operating.	2.0	360 parts per million by volume <sup>1</sup> (existing).	§ 63.543(a),(c)(1).
		70 parts per million by volume <sup>1</sup> (new) <sup>2</sup> .	§ 63.543(a),(c)(2).
Blast .....	2.0	360 parts per million by volume <sup>1</sup> (existing).	§ 63.543(a),(d).
		70 parts per million by volume <sup>1</sup> (new) <sup>2</sup> .	§ 63.543(e).
		0.20 kilograms per hour <sup>3</sup> .....	§ 63.543(g).
Reverberatory, rotary, and electric ...	2.0	Not applicable .....	§ 63.543(a).

<sup>1</sup>Total hydrocarbons emission limits are as propane at 4 percent carbon dioxide to correct for dilution, based on a 3-hour average.

<sup>2</sup>New sources include those furnaces that commence construction or reconstruction after June 9, 1994.

<sup>3</sup>Applicable to blast furnace charging process fugitive emissions that are not combined with the blast furnace process emissions prior to the point at which compliance with the total hydrocarbons concentration standard is determined.

[62 FR 32216, June 13, 1997, as amended at 63 FR 45011, Aug. 24, 1998]

**§ 63.544 Standards for process fugitive sources.**

(a) Each owner or operator of a secondary lead smelter shall control the process fugitive emission sources listed in paragraphs (a)(1) through (a)(6) of this section in accordance with the equipment and operational standards presented in paragraphs (b) and (c) of this section.

(1) Smelting furnace and dryer charging hoppers, chutes, and skip hoists;

(2) Smelting furnace lead taps, and molds during tapping;

(3) Smelting furnace slag taps, and molds during tapping;

(4) Refining kettles;

(5) Dryer transition pieces; and

(6) Agglomerating furnace product taps.

(b) Process fugitive emission sources shall be equipped with an enclosure hood meeting the requirements of paragraphs (b)(1), (b)(2), or (b)(3) of this section, or be located in a total enclosure subject to general ventilation that maintains the building at a lower than ambient pressure to ensure in-draft through any doorway opening.

(1) All process fugitive enclosure hoods except those specified for refining kettles and dryer transition pieces shall be ventilated to maintain a face velocity of at least 90 meters per

minute (300 feet per minute) at all hood openings.

(2) Process fugitive enclosure hoods required for refining kettles in paragraph (a) of this section shall be ventilated to maintain a face velocity of at least 75 meters per minute (250 feet per minute).

(3) Process fugitive enclosure hoods required over dryer transition pieces in paragraph (a) of this section shall be ventilated to maintain a face velocity of at least 110 meters per minute (350 feet per minute).

(c) Ventilation air from all enclosures hoods and total enclosures shall be conveyed to a control device. Gases discharged to the atmosphere from these control devices shall not contain lead compounds in excess of 2.0 milligrams of lead per dry standard cubic meter (0.00087 grains per dry standard cubic foot).

(d) All dryer emission vents and agglomerating furnace emission vents shall be ventilated to a control device that shall not discharge to the atmosphere any gases that contain lead compounds in excess of 2.0 milligrams of lead per dry standard cubic meter (0.00087 grains per dry standard cubic foot).

(e) Except as provided in paragraph (f) of this section, following the date of