## Subpart SSS [Reserved]

## Subpart TTT—National Emission Standards for Hazardous Air Pollutants for Primary Lead Smelting

SOURCE: 64 FR 30204, June 4, 1999, unless otherwise noted.

### § 63.1541 Applicability.

(a) The provisions of this subpart apply to any facility engaged in producing lead metal from ore concentrates. The category includes, but is not limited to, the following smelting processes: Sintering, reduction, preliminary treatment, refining and casting operations, process fugitive sources, and fugitive dust sources. The sinter process includes an updraft or downdraft sintering machine. The reduction process includes the blast furnace, electric smelting furnace with a converter or reverberatory furnace, and slag fuming furnace process units. The preliminary treatment process includes the drossing kettles and dross reverberatory furnace process units. The refining process includes the refinery process unit. The provisions of this subpart do not apply to secondary lead smelters, lead refiners, or lead remelters.

(b) Table 1 of this subpart specifies the provisions of subpart A of this part that apply and those that do not apply to owners and operators of primary lead processors.

[76 FR 70852, Nov. 15, 2011]

### § 63.1542 Definitions.

Terms used in this subpart are defined in the Act, in subpart A of this part, or in this section as follows:

*Affirmative defense* means, in the context of an enforcement proceeding, a response or defense put forward by a defendant, regarding which the defendant has the burden of proof, and the merits of which are independently and objectively evaluated in a judicial or administrative proceeding.

*Bag leak detection system* means a system that is capable of continuously monitoring relative particulate matter (dust) loadings in the exhaust of a baghouse in order to detect bag leaks and other upset conditions. A bag leak detection system includes, but is not limited to, an instrument that operates on triboelectric, light scattering, light transmittance, or other effect to continuously monitor relative particulate matter loadings.

*Blast furnace* means any reduction furnace to which sinter is charged and which forms separate layers of molten slag and lead bullion.

*Building* means a roofed and walled structure with limited openings to allow access and egress for people and vehicles.

*Charging location* means the physical opening through which raw materials are introduced into a sinter machine, blast furnace, or dross furnace.

*Dross furnace* means any smelting furnace to which drosses are charged and which chemically and physically separates lead from other impurities.

*Drossing and 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 drossing, refining, or alloying lead. Included are pot furnaces, receiving kettles, and holding kettles.

*Fugitive dust source* means a stationary source of hazardous air pollutant emissions at a primary lead processor resulting from the handling, storage, transfer, or other management of lead-bearing materials where the source is not part of a specific process, process vent, or stack. Fugitive dust sources include roadways, storage piles, materials handling transfer points, and materials transport areas.

*Furnace area* means any area of a primary lead processor in which a blast furnace or dross furnace is located.

*Lead refiner* means any facility that refines lead metal that is not located at a primary lead processor.

*Lead remelter* means any facility that remelts lead metal that is not located at a primary lead processor.

*Malfunction* means any sudden, infrequent, and not reasonably preventable failure of air pollution control and monitoring equipment, process equipment, or a process to operate in a normal or usual manner which causes, or

has the potential to cause, the emission limitations in an applicable standard to be exceeded. Failures that are caused in part by poor maintenance or careless operation are not malfunctions.

*Materials storage and handling area* means any area of a primary lead processor in which lead-bearing materials (including ore concentrate, sinter, granulated lead, dross, slag, and flue dust) are stored or handled between process steps, including areas in which materials are stored in piles, bins, or tubs, and areas in which material is prepared for charging to a sinter machine or smelting furnace or other lead processing operation.

*Operating time* means the period of time in hours that an affected source is in operation beginning at a startup and ending at the next shutdown.

*Plant operating time* means the period of time in hours that either a sinter machine or blast furnace is in operation.

*Plant roadway* means any area of a primary lead processor that is subject to vehicle traffic, including traffic by forklifts, front-end loaders, or vehicles carrying ore concentrates 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.

*Primary lead processor* means any facility engaged in the production of lead metal from lead sulfide ore concentrates through the use of pyrometallurgical or other techniques.

*Process fugitive source* means a source of hazardous air pollutant emissions at a primary lead processor that is associated with lead smelting, processing or refining but is not the primary exhaust stream and is not a fugitive dust source. Process fugitive sources include sinter machine charging locations, sinter machine discharge locations, sinter crushing and sizing equipment, furnace charging locations, furnace taps, and drossing kettle and refining kettle charging or tapping locations.

*Refining and casting area* means any area of a primary lead processor in which drossing or refining operations occur, or casting operations occur.

*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.

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

*Sinter machine* means any device in which a lead sulfide ore concentrate charge is heated in the presence of air to eliminate sulfur contained in the charge and to agglomerate the charge into a hard porous mass called sinter.

*Sinter machine area* means any area of a primary lead processor where a sinter machine, or sinter crushing and sizing equipment is located.

*Sinter machine discharge end* means the physical opening at the end of a sinter machine where the sinter exits the sinter machine.

*Startup* means the setting in operation of an affected source for any purpose.

*Tapping location* means the opening thru which lead and slag are removed from the furnace.

*Tapping location* means the opening through which lead and slag are removed from the furnace.

[64 FR 30204, June 4, 1999, as amended at 71 FR 20462, Apr. 20, 2006; 76 FR 70852, Nov. 15, 2011]

### § 63.1543 Standards for process and process fugitive sources.

(a) No owner or operator of any existing, new, or reconstructed primary lead processor shall discharge or cause to be discharged into the atmosphere lead compounds in excess of 0.97 pounds per ton of lead metal produced from the aggregation of emissions discharged from air pollution control devices used to control emissions from the sources listed in paragraphs (a)(1) through (9) of this section.

(1) Sinter machine;

(2) Blast furnace;

(3) Dross furnace;

(4) Dross furnace charging location;

(5) Blast furnace and dross furnace tapping location;

(6) Sinter machine charging location;

(7) Sinter machine discharge end;

(8) Sinter crushing and sizing equipment; and

(9) Sinter machine area.

(b) No owner or operator of any existing, new, or reconstructed primary lead processor shall discharge or cause to be discharged into the atmosphere lead compounds in excess of 1.2 tons per year from the aggregation of the air pollution control devices used to control emissions from furnace area and refining and casting operations.

(c) The process fugitive sources listed in paragraphs (a)(4) through (8) of this section must be equipped with a hood and must be ventilated to a baghouse or equivalent control device. The hood design and ventilation rate must be consistent with American Conference of Governmental Industrial Hygienists recommended practices.

(d) The sinter machine area must be enclosed in a building that is ventilated to a baghouse or equivalent control device at a rate that maintains a positive in-draft through any doorway opening.

(e) Except as provided in paragraph (f) of this section, following the initial tests to demonstrate compliance with paragraphs (a) and (b) of this section, the owner or operator of a primary lead processor must conduct compliance tests for lead compounds on a quarterly basis (no later than 100 days following any previous compliance test).

(f) If the 12 most recent compliance tests demonstrate compliance with the emission limit specified in paragraphs (a) and (b) of this section, the owner or operator of a primary lead processor shall be allowed up to 12 calendar months from the last compliance test to conduct the next compliance test for lead compounds.

(g) The owner or operator of a primary lead processor must maintain and operate each baghouse used to control emissions from the sources listed in paragraphs (a)(1) through (9) and (b) of this section such that the alarm on a bag leak detection system required under §63.1547(c)(8) does not sound for more than five percent of the total operating time in a 6-month reporting period.

(h) The owner or operator of a primary lead processor must record the date and time of a bag leak detection system alarm and initiate procedures to determine the cause of the alarm according to the corrective action plan required under §63.1547(f) within 1 hour of the alarm. The cause of the alarm must be corrected as soon as practicable.

(i) At all times, the owner or operator must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation 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 operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.

[76 FR 70853, Nov. 15, 2011]

### §63.1544 Standards for fugitive dust sources.

(a) Each owner or operator of a primary lead processor must prepare, and at all times operate according to, a standard operating procedures manual that describes in detail the measures that will be put in place to control fugitive dust emissions from the sources listed in paragraphs (a)(1) through (a)(5) of this section that incorporates each of the specific work practices listed in paragraphs (a)(1) through (a)(5) of this section:

(1) *Plant roadways.* (i) Paved plant roadways must be cleaned using a wet sweeper unless the temperature falls below 39 degrees Fahrenheit or when the application of water results in the formation of ice. During periods when the temperature is below 39 degrees Fahrenheit, paved plant roadways must be cleaned using a high efficiency dry sweeper.

(ii) Continuously operate a sprinkler system to wet plant roadways to prevent fugitive dust entrainment. This sprinkler system must be operated except during periods when the temperature is less than 39 degrees Fahrenheit or when the application of water results in formation of ice.

(2) *Material storage and handling area(s).* (i) Chemically stabilize inactive concentrate storage piles a minimum of once every month to reduce

particulate from wind born re-suspension.

(ii) Finished sinter must be sufficiently wetted to ensure fugitive dust emissions are minimized prior to loading to railcars.

(3) *Sinter machine area(s).* (i) Personnel doors must be kept closed during operations except when entering or exiting the furnace building by the aid of door weights or similar device for automatic closure.

(ii) Large equipment doors must remain closed except when entering or existing the building using an automatic closure system or equivalent lock-and-key method.

(iii) It may be necessary to open doors subject to the requirements in § 63.1544(a)(3)(i) and (ii) to prevent heat stress or exhaustion of workers inside the sinter plant building. Records of such periods must be included in the report required under § 63.1549(e)(8).

(4) *Furnace area(s).* (i) Personnel doors must be kept closed during operations except when entering or exiting the furnace building by the aid of door weights or similar device for automatic closure.

(ii) Large equipment doors must remain closed except when entering or existing the building using an automatic closure system or equivalent lock-and-key method.

(iii) It may be necessary to open doors subject to the requirements in § 63.1544(a)(4)(i) and (ii) to prevent heat stress or exhaustion of workers inside the blast furnace building. Records of such periods must be included in the report required under § 63.1549(e)(8).

(5) *Refining and casting area(s).* (i) Personnel doors must be kept closed during operations except when entering or exiting the furnace building by the aid of door weights or similar device for automatic closure.

(ii) Large equipment doors must remain closed except when entering or existing the building using an automatic closure system or equivalent lock-and-key method.

(iii) It may be necessary to open doors subject to the requirements in § 63.1544(a)(5)(i) and (ii) to prevent heat stress or exhaustion of workers inside the refining and casting building. Records of such periods must be included in the report required under § 63.1549(e)(8).

(b) Notwithstanding paragraph (c) of this section, the standard operating procedures manual shall be submitted to the Administrator or delegated authority for review and approval.

(c) Existing manuals that describe the measures in place to control fugitive dust sources required as part of a State implementation plan for lead shall satisfy the requirements of paragraph (a) of this section provided they include all the work practices as described in paragraphs (a)(1) through (5) of this section and provided they address all the sources listed in paragraphs (a)(1) through (5) of this section.

(d) At all times, the owner or operator must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation 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 operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.

[76 FR 70853, Nov. 15, 2011]

### § 63.1545 Compliance dates.

(a) Each owner or operator of an existing primary lead processor must achieve compliance with the requirements in § 16.1543(a) no later than January 17, 2012. Each owner or operator of an existing primary lead processor must achieve compliance with the requirements of § 63.1544 no later than February 13, 2012. Each owner or operator of an existing primary lead processor must achieve compliance with the requirements in § 63.1543(b) and (e) of this subpart no later than November 15, 2013.

(b) Each owner or operator of a new primary lead processor must achieve compliance with the requirements of this subpart no later than January 17, 2012 or startup, whichever is later.

(c) Prior to the dates specified in § 63.1545(a), each owner or operator of

an existing primary lead processor must continue to comply with the requirements of §§ 63.1543 and 63.1544 as promulgated in the June 4, 1999 NESHAP for Primary Lead Smelting.

(d) Each owner or operator of an existing primary lead processor must comply with the requirements of §§ 63.1547(g)(1) and (2), 63.1551, and Table 1 of Subpart TTT of Part 63 on November 15, 2011.

[76 FR 70854, Nov. 15, 2011]

### § 63.1546 Performance testing.

(a) The following procedures must be used to determine quarterly compliance with the emissions standard for lead compounds under § 63.1543(a) and (b) for existing sources:

(1) Each owner or operator of existing sources listed in § 63.1543(a)(1) through (9) and (b) must determine the lead compound emissions rate, in units of pounds of lead per hour according to the following test methods in appendix A of part 60 of this chapter:

(i) Method 1 must be used to select the sampling port location and the number of traverse points.

(ii) Method 2, 2F, 2G must be used to measure volumetric flow rate.

(iii) Method 3, 3A, 3B must be used for gas analysis.

(iv) Method 4 must be used to determine moisture content of the stack gas.

(v) Method 12 or Method 29 must be used to determine lead emissions rate of the stack gas.

(2) A performance test shall consist of at least three runs. For each test run with Method 12 or Method 29, the minimum sample time must be 60 minutes and the minimum volume must be 1 dry standard cubic meter (35 dry standard cubic feet).

(3) Performance tests shall be completed quarterly, once every 3 months, to determine compliance.

(4) The lead emission rate in pounds per quarter is calculated by multiplying the quarterly lead emission rate in pounds per hour by the quarterly plant operating time, in hours as shown in Equation 1:

$$E_{Pb} = ER_{Pb} \times QPOT \quad \text{(Eq. 1)}$$

Where:

$E_{Pb}$ = quarterly lead emissions, pounds per quarter;

$ER_{Pb}$ = quarterly lead emissions rate, pounds per hour; and

QPOT = quarterly plant operating time, hours per quarter.

(5) The lead production rate, in units of tons per quarter, must be determined based on production data for the previous quarter according to the procedures detailed in paragraphs (a)(5)(i) through (iv) of this section:

(i) Total lead products production multiplied by the fractional lead content must be determined in units of tons.

(ii) Total copper matte production multiplied by the fractional lead content must be determined in units of tons.

(iii) Total copper speiss production multiplied by the fractional lead content must be determined in units of tons.

(iv) Total quarterly lead production must be determined by summing the values obtained in paragraphs (a)(5)(i) through (iii) of this section.

(6) To determine compliance with the production-based lead compound emission rate in § 63.1543(a), the quarterly production-based lead compound emission rate, in units of pounds of lead emissions per ton of lead produced, is calculated as shown in Equation 2 by dividing lead emissions by lead production.

$$CE_{Pb} = \frac{E_{Pb}}{P_{Pb}} \qquad \text{(Eq. 2)}$$

Where:

$CE_{Pb}$ = quarterly production-based lead compound emission rate, in units of pounds of lead emissions per ton of lead produced;

$E_{Pb}$ = quarterly lead emissions, pounds per quarter; and

$P_{Pb}$ = quarterly lead production, tons per quarter.

(7) To determine quarterly compliance with the emissions standard for lead compounds under §63.1543(b), sum the lead compound emission rates for the current and previous three quarters for the sources in §63.1543(b), as determined in accordance with paragraphs (a)(1) through (4) of this section.

(b) Owners and operators must perform an initial compliance test to demonstrate compliance with the sinter building in-draft requirements of §63.1543(d) at each doorway opening in accordance with paragraphs (b)(1) through (4) of this section.

(1) Use a propeller anemometer or equivalent device.

(2) Determine doorway in-draft by placing the anemometer in the plane of the doorway opening near its center.

(3) Determine doorway in-draft for each doorway that is open during normal operation with all remaining doorways in their customary position during normal operation.

(4) Do not determine doorway in-draft when ambient wind speed exceeds 2 meters per second.

(c) Performance tests shall be conducted under such conditions as the Administrator specifies to the owner or operator based on representative performance of the affected source for the period being tested. Upon request, the owner or operator shall make available to the Administrator such records as may be necessary to determine the conditions of performance tests.

[76 FR 70854, Nov. 15, 2011]

### §63.1547 Monitoring requirements.

(a) Owners and operators of primary lead processors must prepare, and at all times operate according to, a standard operating procedures manual that describes in detail the procedures for inspection, maintenance, and bag leak detection and corrective action for all baghouses that are used to control process, process fugitive, or fugitive dust emissions from any source subject to the lead emission standards in §§63.1543 and 63.1544, including those used to control emissions from general ventilation systems.

(b) The standard operating procedures manual for baghouses required by paragraph (a) of this section must be submitted to the Administrator or delegated authority for review and approval.

(c) The procedures specified in the standard operating procedures manual for inspections and routine maintenance must, at a minimum, include the requirements of paragraphs (c)(1) through (8) of this section.

(1) Weekly confirmation that dust is being removed from hoppers through visual inspection or equivalent means of ensuring the proper functioning of removal mechanisms.

(2) Daily check of compressed air supply for pulse-jet baghouses.

(3) An appropriate methodology for monitoring cleaning cycles to ensure proper operation.

(4) Monthly check of bag cleaning mechanisms for proper functioning through visual inspection or equivalent means.

(5) Quarterly visual check of bag tension on reverse air and shaker-type baghouses to ensure that bags are not kinked (kneed or bent) or laying on their sides. Such checks are not required for shaker-type baghouses using self-tensioning (spring loaded) devices.

(6) Quarterly confirmation of the physical integrity of the baghouse through visual inspection of the baghouse interior for air leaks.

(7) Quarterly inspection of fans for wear, material buildup, and corrosion through visual inspection, vibration detectors, or equivalent means.

(8) Except as provided in paragraph (h) of this section, continuous operation of a bag leak detection system.

(d) The procedures specified in the standard operating procedures manual for maintenance must, at a minimum, include a preventative maintenance schedule that is consistent with the baghouse manufacturer's instructions for routine and long-term maintenance.

(e) The bag leak detection system required by paragraph (c)(8) of this section must meet the specifications and requirements of (e)(1) through (8) of this section.

(1) The bag leak detection system must be certified by the manufacturer to be capable of detecting particulate matter emissions at concentrations of 10 milligram per actual cubic meter (0.0044 grains per actual cubic foot) or less.

(2) The bag leak detection system sensor must provide output of relative particulate matter loadings, and the owner or operator must continuously record the output from the bag leak detection system.

(3) The bag leak detection system must be equipped with an alarm system that will sound when an increase in relative particulate loading is detected over a preset level, and the alarm must be located such that it can be heard or otherwise determined by the appropriate plant personnel.

(4) Each bag leak detection system that works based on the triboelectric effect must be installed, calibrated, and maintained in a manner consistent with guidance provided in the U.S. Environmental Protection Agency guidance document ''Fabric Filter Bag Leak Detection Guidance'' (EPA–454/R–98–015). Other bag leak detection systems must be installed, calibrated, and maintained in a manner consistent with the manufacturer's written specifications and recommendations.

(5) The initial adjustment of the system must, at a minimum, consist of establishing the baseline output by adjusting the sensitivity (range) and the averaging period of the device, and establishing the alarm set points and the alarm delay time.

(6) Following initial adjustment, the owner or operator must not adjust the sensitivity or range, averaging period, alarm set points, or alarm delay time, except as detailed in the approved SOP required under paragraph (a) of this section. In no event shall the sensitivity be increased by more than 100 percent or decreased more than 50 percent over a 365-day period unless a responsible official certifies that the baghouse has been inspected and found to be in good operating condition.

(7) For negative pressure, induced air baghouses, and positive pressure baghouses that are discharged to the atmosphere through a stack, the bag leak detector must be installed downstream of the baghouse and upstream of any wet acid gas scrubber.

(8) Where multiple detectors are required, the system's instrumentation and alarm may be shared among detectors.

(f) The standard operating procedures manual required by paragraph (a) of this section must include a corrective action plan that specifies the procedures to be followed in the event of a bag leak detection system alarm. The corrective action plan must include at a minimum, procedures to be used to determine the cause of an alarm, as well as actions to be taken to minimize emissions, which may include, but are not limited to, the following.

(1) Inspecting the baghouse for air leaks, torn or broken bags or filter media, or any other condition that may cause an increase in emissions.

(2) Sealing off defective bags or filter media.

(3) Replacing defective bags or filter media, or otherwise repairing the control device.

(4) Sealing off a defective baghouse compartment.

(5) Cleaning the bag leak detection system probe, or otherwise repairing or maintaining the bag leak detection system.

(6) Shutting down the process producing the particulate emissions.

(g) The percentage of total operating time the alarm on the bag leak detection system sounds in a 6-month reporting period must be calculated in order to determine compliance with the five percent operating limit in § 63.1543(g). The percentage of time the alarm on the bag leak detection system

sounds must be determined according to paragraphs (g)(1) through (3) of this section.

(1) For each alarm where the owner or operator initiates procedures to determine the cause of an alarm within 1 hour of the alarm, 1 hour of alarm time must be counted.

(2) For each alarm where the owner or operator does not initiate procedures to determine the cause of the alarm within 1 hour of the alarm, alarm time will be counted as the actual amount of time taken by the owner or operator to initiate procedures to determine the cause of the alarm.

(3) The percentage of time the alarm on the bag leak detection system sounds must be calculated as the ratio of the sum of alarm times to the total operating time multiplied by 100.

(h) Baghouses equipped with HEPA filters as a secondary filter used to control process or process fugitive sources subject to the lead emission standards in § 63.1543 are exempt from the requirement in paragraph (c)(8) of this section to be equipped with a bag leak detector. The owner or operator of an affected source that uses a HEPA filter must monitor and record the pressure drop across the HEPA filter system daily. If the pressure drop is outside the limit(s) specified by the filter manufacturer, the owner or operator must take appropriate corrective measures, which may include, but not be limited to, the following:

(1) Inspecting the filter and filter housing for air leaks and torn or broken filters.

(2) Replacing defective filter media, or otherwise repairing the control device.

(3) Sealing off a defective control device by routing air to other comparable control devices.

(4) Shutting down the process producing the particulate emissions.

(i) Owners and operators must monitor sinter machine building in-draft to demonstrate continued compliance with the operating standard specified in § 63.1543(d) in accordance with either paragraph (i)(1), (2), or (3) of this section.

(1) Owners and operators must check and record on a daily basis doorway in-draft at each doorway in accordance with the methodology specified in § 63.1546(b).

(2) Owners and operators must establish and maintain baseline ventilation parameters which result in a positive in-draft according to paragraphs (i)(2)(i) through (iv) of this section.

(i) Owners and operators must install, calibrate, maintain, and operate a monitoring device that continuously records the volumetric flow rate through each separately ducted hood; or install, calibrate, maintain, and operate a monitoring device that continuously records the volumetric flow rate at the control device inlet of each exhaust system ventilating the building. The flow rate monitoring device(s) can be installed in any location in the exhaust duct such that reproducible flow rate measurements will result. The flow rate monitoring device(s) must have an accuracy of plus or minus 10 percent over the normal process operating range and must be calibrated according to manufacturer's instructions.

(ii) During the initial demonstration of sinter building in-draft, and at any time the owner or operator wishes to re-establish the baseline ventilation parameters, the owner or operator must continuously record the volumetric flow rate through each separately ducted hood, or continuously record the volumetric flow rate at the control device inlet of each exhaust system ventilating the building and record exhaust system damper positions. The owner or operator must determine the average volumetric flow rate(s) corresponding to the period of time the in-draft compliance determinations are being conducted.

(iii) The owner or operator must maintain the volumetric flow rate(s) at or above the value(s) established during the most recent in-draft determination at all times the sinter machine is in operation. Volumetric flow rate(s) must be calculated as a 15-minute average.

(iv) If the volumetric flow rate is monitored at the control device inlet, the owner or operator must check and record damper positions daily to ensure they are in the positions they were in

during the most recent in-draft determination.

(3) An owner or operator may request an alternative monitoring method by following the procedures and requirements in § 63.8(f) of the General Provisions.

(j) Each owner or operator of new or modified sources listed under § 63.1543 (a)(1) through (9) and (b) must install, calibrate, maintain, and operate a continuous emission monitoring system (CEMS) for measuring lead emissions and a continuous emission rate monitoring system (CERMS) subject to Performance Specification 6 of appendix B to part 60.

(1) Each owner or operator of a source subject to the emissions limits for lead compounds under § 63.1543(a)and (b) must install a CEMS for measuring lead emissions within 180 days of promulgation of performance specifications for lead CEMS.

(i) Prior to promulgation of performance specifications for CEMS used to measure lead concentrations, an owner or operator must use the procedure described in § 63.1546(a)(1) through (7) of this section to determine compliance.

(2) If a CEMS used to measure lead emissions is applicable, the owner or operator must install a CERMS with a sensor in a location that provides representative measurement of the exhaust gas flow rate at the sampling location of the CEMS used to measure lead emissions, taking into account the manufacturer's recommendations. The flow rate sensor is that portion of the system that senses the volumetric flow rate and generates an output proportional to that flow rate.

(i) The CERMS must be designed to measure the exhaust gas flow rate over a range that extends from a value of at least 20 percent less than the lowest expected exhaust flow rate to a value of at least 20 percent greater than the highest expected exhaust gas flow rate.

(ii) The CERMS must be equipped with a data acquisition and recording system that is capable of recording values over the entire range specified in paragraph (j)(2)(i) of this section.

(iii) Each owner or operator must perform an initial relative accuracy test of the CERMS in accordance with the applicable Performance Specification in appendix B to part 60 of the chapter.

(iv) Each owner or operator must operate the CERMS and record data during all periods of operation of the affected facility including periods of startup, shutdown, and malfunction, except for periods of monitoring system malfunctions, repairs associated with monitoring system malfunctions, and required monitoring system quality assurance or quality control activities (including, as applicable, calibration checks and required zero and span adjustments.

(3) Each owner or operator must calculate the lead emissions rate in tons per year by summing all hours of CEMS data for a year to determine compliance with § 63.1543(b).

(i) When the CERMS are unable to provide quality assured data the following applies:

(A) When data are not available for periods of up to 48 hours, the highest recorded hourly emission rate from the previous 24 hours must be used.

(B) When data are not available for 48 or more hours, the maximum daily emission rate based on the previous 30 days must be used.

[76 FR 70855, Nov. 15, 2011]

### § 63.1548 Notification requirements.

(a) The owner or operator of a primary lead processor must comply with the notification requirements of § 63.9 of subpart A, General Provisions as specified in Table 1 of this subpart.

(b) The owner or operator of a primary lead processor must submit the standard operating procedures manual for baghouses required under § 63.1547(a) to the Administrator or delegated authority along with a notification that the primary lead processor is seeking review and approval of the manual and procedures. Owners or operators of existing primary lead processors must submit this notification no later than November 6, 2000. The owner or operator of a primary lead processor that commences construction or reconstruction after April 17, 1998, must submit this notification no later than 180 days

before startup of the constructed or reconstructed primary lead processor, but no sooner than September 2, 1999.

[76 FR 70857, Nov. 15, 2011]

### § 63.1549 Recordkeeping and reporting requirements.

(a) The owner or operator of a primary lead processor must comply with the recordkeeping requirements of § 63.10 of subpart A, General Provisions as specified in Table 1 of this subpart.

(b) In addition to the general records required by paragraph (a) of this section, each owner or operator of a primary lead processor must maintain for a period of 5 years, records of the information listed in paragraphs (b)(1) through (10) of this section.

(1) Production records of the weight and lead content of lead products, copper matte, and copper speiss.

(2) Records of the bag leak detection system output.

(3) An identification of the date and time of all bag leak detection system alarms, the time that procedures to determine the cause of the alarm were initiated, the cause of the alarm, an explanation of the actions taken, and the date and time the cause of the alarm was corrected.

(4) Any recordkeeping required as part of the practices described in the standard operating procedures manual for baghouses required under § 63.1547(a).

(5) If an owner or operator chooses to demonstrate continuous compliance with the sinter building in-draft requirement under § 63.1543(d) by employing the method allowed in § 63.1547(i)(1), the records of the daily doorway in-draft checks, an identification of the periods when there was not a positive in-draft, and an explanation of the corrective actions taken.

(6) If an owner or operator chooses to demonstrate continuous compliance with the sinter building in-draft requirement under § 63.1543(d) by employing the method allowed in § 63.1547(i)(2), the records of the output from the continuous volumetric flow monitor(s), an identification of the periods when the 15-minute volumetric flow rate dropped below the minimum established during the most recent in-draft determination, and an explanation of the corrective actions taken.

(7) If an owner or operator chooses to demonstrate continuous compliance with the sinter building in-draft requirement under § 63.1543(d) by employing the method allowed in § 63.1547(i)(2), and volumetric flow rate is monitored at the baghouse inlet, records of the daily checks of damper positions, an identification of the days that the damper positions were not in the positions established during the most recent in-draft determination, and an explanation of the corrective actions taken.

(8) Records of the occurrence and duration of each malfunction of operation (*i.e.,* process equipment) or the air pollution control equipment and monitoring equipment.

(9) Records of actions taken during periods of malfunction to minimize emissions in accordance with §§ 63.1543(i) and 63.1544(d), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation.

(c) Records for the most recent 2 years of operation must be maintained on site. Records for the previous 3 years may be maintained off site.

(d) The owner or operator of a primary lead processor must comply with the reporting requirements of § 63.10 of subpart A, General Provisions as specified in Table 1 of this subpart.

(e) In addition to the information required under § 63.10 of the General Provisions, the owner or operator must provide semi-annual reports containing the information specified in paragraphs (e)(1) through (9) of this section to the Administrator or designated authority.

(1) The reports must include records of all alarms from the bag leak detection system specified in § 63.1547(e).

(2) The reports must include a description of the actions taken following each bag leak detection system alarm pursuant to § 63.1547(f).

(3) The reports must include a calculation of the percentage of time the alarm on the bag leak detection system sounded during the reporting period pursuant to § 63.1547(g).

(4) If an owner or operator chooses to demonstrate continuous compliance

with the sinter building in-draft requirement under § 63.1543(d) by employing the method allowed in § 63.1547(i)(1), the reports must contain an identification of the periods when there was not a positive in-draft, and an explanation of the corrective actions taken.

(5) If an owner or operator chooses to demonstrate continuous compliance with the sinter building in-draft requirement under § 63.1543(d) by employing the method allowed in § 63.1547(i)(2), the reports must contain an identification of the periods when the 15-minute volumetric flow rate(s) dropped below the minimum established during the most recent in-draft determination, and an explanation of the corrective actions taken.

(6) If an owner or operator chooses to demonstrate continuous compliance with the sinter building in-draft requirement under § 63.1543(d) by employing the method allowed in § 63.1547(i)(2), and volumetric flow rate is monitored at the baghouse inlet, the reports must contain an identification of the days that the damper positions were not in the positions established during the most recent in-draft determination, and an explanation of the corrective actions taken.

(7) The reports must contain a summary of the records maintained as part of the practices described in the standard operating procedures manual for baghouses required under § 63.1547(a), including an explanation of the periods when the procedures were not followed and the corrective actions taken.

(8) The reports shall contain a summary of the fugitive dust control measures performed during the required reporting period, including an explanation of any periods when the procedures outlined in the standard operating procedures manual required by § 63.1544(a) were not followed and the corrective actions taken. The reports shall not contain copies of the daily records required to demonstrate compliance with the requirements of the standard operating procedures manuals required under §§ 63.1544(a) and 63.1547(a).

(9) If there was a malfunction during the reporting period, the report shall also include the number, duration, and a brief description for each type of malfunction which occurred during the reporting period and which caused or may have caused any applicable emission limitation to be exceeded. The report must also include a description of actions taken by an owner or operator during a malfunction of an affected source to minimize emissions in accordance with §§ 63.1543(i) and 63.1544(d), including actions taken to correct a malfunction.

[76 FR 70857, Nov. 15, 2011]

### § 63.1550 Delegation of authority.

(a) In delegating implementation and enforcement authority to a State under section 112(l) of the act, the authorities contained in paragraph (b) of this section must be retained by the Administrator and not transferred to a State.

(b) Authorities which will not be delegated to States: No restrictions.

[76 FR 70858, Nov. 15, 2011]

### § 63.1551 Affirmative defense for exceedance of emission limit during malfunction.

In response to an action to enforce the standards set forth in this subpart you may assert an affirmative defense to a claim for civil penalties for exceedances of such standards that are caused by malfunction, as defined at 40 CFR 63.2. Appropriate penalties may be assessed, however, if you fail to meet your burden of proving all of the requirements in the affirmative defense. The affirmative defense shall not be available for claims for injunctive relief.

(a) *Affirmative defense.* To establish the affirmative defense in any action to enforce such a limit, you must timely meet the notification requirements in paragraph (b) of this section, and must prove by a preponderance of evidence that:

(1) The excess emissions:

(i) Were caused by a sudden, infrequent, and unavoidable failure of air pollution control and monitoring equipment, process equipment, or a process to operate in a normal or usual manner, and

(ii) Could not have been prevented through careful planning, proper design

or better operation and maintenance practices; and

(iii) Did not stem from any activity or event that could have been foreseen and avoided, or planned for; and

(iv) Were not part of a recurring pattern indicative of inadequate design, operation, or maintenance; and

(2) Repairs were made as expeditiously as possible when the applicable emission limitations were being exceeded. Off-shift and overtime labor were used, to the extent practicable to make these repairs; and

(3) The frequency, amount and duration of the excess emissions (including any bypass) were minimized to the maximum extent practicable during periods of such emissions; and

(4) If the excess emissions resulted from a bypass of control equipment or a process, then the bypass was unavoidable to prevent loss of life, personal injury, or severe property damage; and

(5) All possible steps were taken to minimize the impact of the excess emissions on ambient air quality, the environment and human health; and

(6) All emissions monitoring and control systems were kept in operation if at all possible, consistent with safety and good air pollution control practices; and

(7) All of the actions in response to the excess emissions were documented by properly signed, contemporaneous operating logs; and

(8) At all times, the facility was operated in a manner consistent with good practices for minimizing emissions; and

(9) A written root cause analysis has been prepared, the purpose of which is to determine, correct, and eliminate the primary causes of the malfunction and the excess emissions resulting from the malfunction event at issue. The analysis shall also specify, using best monitoring methods and engineering judgment, the amount of excess emissions that were the result of the malfunction.

(b) *Notification.* The owner or operator of the facility experiencing an exceedance of its emission limit(s) during a malfunction shall notify the Administrator by telephone or facsimile (FAX) transmission as soon as possible, but no later than two business days after the initial occurrence of the malfunction, if it wishes to avail itself of an affirmative defense to civil penalties for that malfunction. The owner or operator seeking to assert an affirmative defense shall also submit a written report to the Administrator within 45 days of the initial occurrence of the exceedance of the standards in this subpart to demonstrate, with all necessary supporting documentation, that it has met the requirements set forth in paragraph (a) of this section. The owner or operator may seek an extension of this deadline for up to 30 additional days by submitting a written request to the Administrator before the expiration of the 45 day period. Until a request for an extension has been approved by the Administrator, the owner or operator is subject to the requirement to submit such report within 45 days of the initial occurrence of the exceedance.

[76 FR 70858, Nov. 15, 2011]

TABLE 1 TO SUBPART TTT OF PART 63—GENERAL PROVISIONS APPLICABILITY TO SUBPART TTT

| Reference | Applies to subpart TTT | Comment |
|---|---|---|
| 63.6(a), (b), (c) | Yes. | |
| 63.6(d) | No | Section reserved. |
| 63.6(e)(1)(i) | No | See 63.1543(i) and 63.1544(d) for general duty requirement. |
| 63.6(e)(1)(ii) | No. | |
| 63.6(e)(1)(iii) | Yes. | |
| 63.6(e)(2) | No | Section reserved. |
| 63.6(e)(3) | No. | |
| 63.6(f)(1) | No. | |
| 63.6(g) | Yes. | |
| 63.6(h) | No | No opacity limits in rule. |
| 63.6(i) | Yes. | |

| Reference | Applies to subpart TTT | Comment |
|---|---|---|
| 63.6(j) | Yes. | |
| § 63.7(a)–(d) | Yes. | |
| § 63.7(e)(1) | No | See 63.1546(c). |
| § 63.7(e)(2)–(e)(4) | Yes. | |
| 63.7(f), (g), (h) | Yes. | |
| 63.8(a)–(b) | Yes. | |
| 63.8(c)(1)(i) | No. | |
| 63.8(c)(1)(ii) | Yes. | |
| 63.8(c)(1)(iii) | No. | |
| 63.8(c)(2)–(d)(2) | Yes. | |
| 63.8(d)(3) | Yes, except for last sentence. | |
| 63.8(e)–(g) | Yes. | |
| 63.9(a), (b), (c), (e), (g), (h)(1) through (3), (h)(5) and (6), (i) and (j). | Yes. | |
| 63.9(f) | No. | |
| 63.9(h)(4) | No | Reserved. |
| 63.10(b)(2)(i) | No. | |
| 63.10(b)(2)(ii) | No | See 63.1549(b)(9) and (10) for recordkeeping of occurrence and duration of malfunctions and recordkeeping of actions taken during malfunction. |
| 63.10(b)(2)(iii) | Yes. | |
| 63.10(b)(2)(iv)–(b)(2)(v) | No. | |
| 63.10(b)(2)(vi)–(b)(2)(xiv) | Yes. | |
| 63.(10)(b)(3) | Yes. | |
| 63.10(c)(1)–(9) | Yes. | |
| 63.10(c)(10)–(11) | No | See 63.1549(b)(9) and (10) for recordkeeping of malfunctions. |
| 63.10(c)(12)–(c)(14) | Yes. | |
| 63.10(c)(15) | No. | |
| 63.10(d)(1)–(4) | Yes. | |
| 63.10(d)(5) | No | See 63.1549(e)(9) for reporting of malfunctions. |
| 63.10(e)–(f) | Yes. | |

[76 FR 70858, Nov. 15, 2011]

# Subpart UUU—National Emission Standards for Hazardous Air Pollutants for Petroleum Refineries: Catalytic Cracking Units, Catalytic Reforming Units, and Sulfur Recovery Units

SOURCE: 67 FR 17773, Apr. 11, 2002, unless otherwise noted.

## WHAT THIS SUBPART COVERS

### § 63.1560 What is the purpose of this subpart?

This subpart establishes national emission standards for hazardous air pollutants (HAP) emitted from petroleum refineries. This subpart also establishes requirements to demonstrate initial and continuous compliance with the emission limitations and work practice standards.

### § 63.1561 Am I subject to this subpart?

(a) You are subject to this subpart if you own or operate a petroleum refinery that is located at a major source of HAP emissions.

(1) A petroleum refinery is an establishment engaged primarily in petroleum refining as defined in the Standard Industrial Classification (SIC) code 2911 and the North American Industry Classification (NAIC) code 32411, and used mainly for:

(i) Producing transportation fuels (such as gasoline, diesel fuels, and jet fuels), heating fuels (such as kerosene, fuel gas distillate, and fuel oils), or lubricants;

(ii) Separating petroleum; or

(iii) Separating, cracking, reacting, or reforming an intermediate petroleum stream, or recovering a by-product(s) from the intermediate petroleum stream (e.g., sulfur recovery).

(2) A major source of HAP is a plant site that emits or has the potential to emit any single HAP at a rate of 9.07 megagrams (10 tons) or more per year