

Chapter 3745-71 Lead Emissions

3745-71-01 Definitions and Reference to Materials.

(A) The definition in rule 3745-71-01 of the Administrative Code shall apply to this chapter.

(B) "Lead" means solid or gaseous lead and its compounds as measurable by the methods specified in rule [3745-71-03](#) of the Administrative Code or rule 37545-71-05 of the Administrative Code.

(C) "Calendar quarters" means: first quarter - January, February, March; second quarter - April, May, June; third quarter - July, August, September; and fourth quarter - October, November, December.

Effective: 10/04/1994

Promulgated Under: [119.03](#)

Statutory Authority: [3704.03\(E\)](#)

Rule Amplifies: [3704.03\(a\)](#), [3704.03\(E\)](#)

Prior Effective Dates: 3/27/1981

3745-71-03 Methods of Ambient Air Measurement.

For the purposes of ascertaining, defining and measuring ambient air quality, lead shall be measured by the test methods in “Appendix G” of 40 CFR Part 50 “Reference Method for the Determination of Lead in Suspended Particulate Matter Collected From Ambient Air” or by equivalent test methods approved in accordance with “Appendix C” of 40 CFR Part 58.

Effective: 10/04/1994

R.C. [119.032](#) review dates: 06/06/2011 and 08/26/2016

Promulgated Under: [119.03](#)

Statutory Authority: [3704.03\(E\)](#)

Rule Amplifies: [3704.03\(a\)](#), [3704.03\(E\)](#)

Prior Effective Dates: 3/27/1981

3745-71-05 Emissions Test Methods and Procedures and Reporting Requirements for New and Existing Sources.

(A) Compliance with any applicable lead emission limitation shall be determined according to test method 12 in "Appendix A" of 40 CFR Part 60 "Stationary Sources."

(B) For purposes of rule 3745-71-06 of the Administrative Code, tons of lead product refers to total tons of intermediate or final lead product produced by any process that may cause any emission of lead. For a cyclical or batch operation, the lead product per hour shall be obtained by dividing the total weight produced by the number of hours in one complete operation.

(C) The owner or operator of any facility subject to the provisions of rule 3745-71-06 of the Administrative Code shall submit evidence to the director demonstrating compliance with the requirements of paragraphs (A)(1) to (A)(3) and (A)(7) of rule 3745-71-06 of the Administrative Code within six months of the effective date of these rules and prior to each renewal of the permit to operate for any source subject to the provisions of paragraphs (A)(1) to (A)(3) and (A)(7) of rule 3745-71-06 of the Administrative Code.

(D) The owner or operator of any facility subject to the provisions of rule 3745-71-06 of the Administrative Code shall submit production records sufficient to demonstrate compliance with the requirements of paragraph (A)(8) of rule 3745-71-06 of the Administrative Code to the director on a monthly basis.

(E) The owner or operator of any facility subject to the provisions of rule 3745-71-06 of the Administrative Code shall demonstrate compliance with the requirements of paragraph (A)(6) of rule 3745-71-06 of the Administrative Code using the negative pressure system testing methodology specified in "Appendix A" of this chapter on a monthly basis and shall maintain records of the data produced for all parameters identified in "Appendix A" of this chapter.

(F) The owner or operator of any facility subject to the provisions of rule 3745-71-06 of the Administrative Code shall maintain records sufficient to document compliance with the requirements of paragraph (A)(5) of rule 3745-71-06 of the Administrative Code.

(G) The owner or operator of any facility subject to the provisions of rule 3745-71-06 of the Administrative Code shall install, operate and maintain an ambient lead monitoring network as specified by the director.

Effective: 10/04/1994

R.C. [119.032](#) review dates: 06/06/2011

Promulgated Under: [119.03](#)

Statutory Authority: [3704.03\(E\)](#)

Rule Amplifies: [3704.03\(a\)](#), [3704.03\(E\)](#)

Prior Effective Dates: 3/27/1981

APPENDIX A

Negative Pressure System Testing

The owner or operator or operator of a source subject to the requirements of OAC 3745-71-06(A)(6) shall perform smoke testing of outside openings to the building enclosure containing materials storage, materials handling, rotary furnaces and refining operations on a monthly basis.

1) The owner or operator shall determine the effectiveness of the negative pressure system by testing various outside and inside openings leading to the emission areas within the building enclosure. Testing locations shall include, but are not limited to, the following areas:

- a) Flashings around ventilation ducts extending through the roof of the building,
- b) Cracks in walls,
- c) Openings around closed overhead doors,
- d) Air flow direction when outside man-doors are opened in the building enclosure, and
- e) Air flow at man-doors connecting adjacent building structures to the controlled emissions area.

2) The owner or operator shall conduct the smoke testing with MSA ventilation smoke tubes.

3) The owner or operator shall record and maintain records of the monthly testing described above on a map of the building enclosure identifying the location of the emission sources. The map shall include a description of the inside and outside openings tested, arrows depicting air flow at each testing point, date and time of the test, weather conditions at the time of the test and process equipment operating and other emission activity occurring at the time of the test.

4) The owner or operator shall immediately determine the cause of any positive pressure test results, repair the cause and repeat the smoke test described in paragraphs 1 and 2 above as soon as is reasonably possible, after giving consideration to facility and personal safety, and record and maintain the results.

3745-71-06 Source Specific Emission Limits.

(A) The "Master Metals, Incorporated" (OEPA premise number 1318000222) or any subsequent owner or operator of the "Master Metals, Incorporated, 2850 West Third Street, Cleveland, Ohio," facility shall not cause or permit the emission of lead from the following sources to exceed the amounts indicated:

(1) Rotary furnaces numbers 2 and 3 (OEPA source numbers P009 and P010); a total combined maximum of 0.35 pounds of lead per ton of lead product, or a maximum of 1.14 pounds of lead per hour.

(2) Pot furnaces (OEPA source number P006); a total combined maximum of 0.0216 pounds of lead per ton of lead product, or a maximum of 0.06 pounds of lead per hour.

(3) Casting shop (OEPA source number P006); a maximum of 0.0108 pounds of lead per ton of lead product, or a maximum of 0.03 pounds of lead per hour.

(4) Materials handling: no visible emissions. All materials, except lead acid batteries, must be received, handled, and charged in leak proof containers.

(5) Roadways and parking lots: shall install, operate, and maintain the dust suppression program specified in "Appendix B" of this chapter.

(6) Smelting furnaces, kettle refining pots and casting shop (OEPA source numbers P006, P009 and P010); must be within a building enclosure maintaining negative interior pressure and be vented through a secondary control system.

(7) Emissions from the secondary control system required in paragraph (A)(6) of this rule shall not exceed 0.0004249 pounds of lead per ton of lead product or a maximum of 0.001 pounds of lead per hour.

(8) Total lead product shall be limited to 3657 tons per calendar quarter combined from the rotary furnaces (OEPA source numbers P009 and P010) and 3108 tons per calendar quarter combined from the pot furnaces (OEPA source number P006).

(9) Visible emissions of particulate matter from P006, P009, P010 and the secondary control system required in paragraphs (A)(6) and (A)(7) of this rule shall not exceed five percent opacity as determined by Method 9 in Appendix A of 40 CFR 60 Standards of Performance for New Stationary Sources".

Effective: 10/4/1994

Promulgated Under: [119.03](#)

Statutory Authority: [3704.03\(E\)](#)

Rule Amplifies: [3704.03\(a\)](#), [3704.03\(E\)](#)

APPENDIX B

The owner or operator of any facility subject to the provisions of subparagraph (A)(5) of Rule

3745-71-06 of the Administrative Code shall maintain the following fugitive dust program.

1) Building openings:

- a) The owner or operator shall keep all barriers on outside openings of the material processing and material handling building enclosure closed at all times except during ingress and egress through the building opening.
- b) The owner or operator shall keep all barriers that separate areas of the building enclosure that are under negative pressure from those that are not under negative pressure closed at all times except during ingress and egress through the opening.
- c) The owner or operator shall inspect all barriers on inside and outside openings for damage that results in lead emissions inside the building escaping to outside the building monthly. Any time that damage to the inside and outside openings which results in lead emissions to outside the building is detected, the owner or operator shall repair the damage within two weeks of the detection.

2) Sweeping:

- a) The owner or operator shall sweep all paved outdoor areas with a vacuum equipped road sweeper daily. The owner or operator is exempt from sweeping uncovered outdoor areas if there was a 0.1 inch rainfall during the previous 24 hours, or if these areas are covered with snow. The owner or operator shall collect rainfall data with an on-site rain gauge and record dates and rationale when sweeping was not performed.
- b) The owner or operator shall immediately clean up spills of lead containing materials, flue dust, or slag with a vacuum equipped road sweeper, by hand vacuuming or wet sweeping.

3) Equipment handling and cleaning:

- a) The owner or operator shall immediately deposit used bags and cartridge filters in leak-proof containers when replacing bag house or cartridge filters for the control equipment. The owner or operator shall recycle the used bags and cartridge filters in one of the rotary furnaces.
- b) The owner or operator shall clean all mobile equipment used that handles lead bearing scrap or slag daily. Mobile equipment includes, but is not limited to the road sweepers and front end loaders. Cleaning shall be conducted by hand vacuuming, scrubbing, or hosing down with water. The owner or operator shall store vacuumed lead bearing material within the building enclosure and recycle the captured material in the furnaces.
- c) The owner or operator shall inspect the building evacuation system for holes and negative static pressure with an electronic portable magnahelic gauge monthly. The owner or operator shall clean and/or repair the ventilation system if there are visible holes and/or negative static pressure. The owner or operator shall monthly test the electronic magnahelic gauges for accuracy, and repair or replace defective gauges.
- d) The owner or operator shall recycle the baghouse and cartridge filter dust in the furnaces. The owner or operator shall store collected filter dust within the building enclosure.

e) The owner or operator shall store the slag material within the building enclosure. The owner or operator shall apply water to the slag material prior to loading onto trucks that haul the material outside the building enclosure. Water application is not required when the air temperature outside is below 32°F. The owner or operator shall cover all trucks hauling slag or slag residue outside the building enclosure.

4) Wind erosion prevention:

a) The owner or operator shall maintain continuous vegetative cover (grasses) over all areas that are not paved or otherwise continuously covered.

b) The owner or operator shall retain all paved areas.

c) If the owner or operator removes lead bearing soil to comply with Resource Conservation and Recovery Act (RCRA) corrective action requirements, the owner or operator shall remove and handle the soil in accordance with a corrective action plan approved by the Ohio EPA.