

**Environmental Protection Agency**

**§ 60.374**

**§ 60.372 Standards for lead.**

(a) On and after the date on which the performance test required to be conducted by §60.8 is completed, no owner or operator subject to the provisions of this subpart shall cause to be discharged into the atmosphere:

(1) From any grid casting facility any gases that contain lead in excess of 0.40 milligram of lead per dry standard cubic meter of exhaust (0.000176 gr/dscf).

(2) From any paste mixing facility any gases that contain in excess of 1.00 milligram of lead per dry standard cubic meter of exhaust (0.00044 gr/dscf).

(3) From any three-process operation facility any gases that contain in excess of 1.00 milligram of lead per dry standard cubic meter of exhaust (0.00044 gr/dscf).

(4) From any lead oxide manufacturing facility any gases that contain in excess of 5.0 milligrams of lead per kilogram of lead feed (0.010 lb/ton).

(5) From any lead reclamation facility any gases that contain in excess of 4.50 milligrams of lead per dry standard cubic meter of exhaust (0.00198 gr/dscf).

(6) From any other lead-emitting operation any gases that contain in excess of 1.00 milligram per dry standard cubic meter of exhaust (0.00044 gr/dscf).

(7) From any affected facility other than a lead reclamation facility any gases with greater than 0 percent opacity (measured according to Method 9 and rounded to the nearest whole percentage).

(8) From any lead reclamation facility any gases with greater than 5 percent opacity (measured according to Method 9 and rounded to the nearest whole percentage).

(b) When two or more facilities at the same plant (except the lead oxide manufacturing facility) are ducted to a common control device, an equivalent standard for the total exhaust from the commonly controlled facilities shall be determined as follows:

$$S_e = \sum_{a=1}^N S_a (Q_{sda} / Q_{sdT})$$

Where:

$S_e$ =is the equivalent standard for the total exhaust stream.

$S_a$ =is the actual standard for each exhaust stream ducted to the control device.

$N$ =is the total number of exhaust streams ducted to the control device.

$Q_{sda}$ =is the dry standard volumetric flow rate of the effluent gas stream from each facility ducted to the control device.

$Q_{sdT}$ =is the total dry standard volumetric flow rate of all effluent gas streams ducted to the control device.

**§ 60.373 Monitoring of emissions and operations.**

The owner or operator of any lead-acid battery manufacturing facility subject to the provisions of this subpart and controlled by a scrubbing system(s) shall install, calibrate, maintain, and operate a monitoring device(s) that measures and records the pressure drop across the scrubbing system(s) at least once every 15 minutes. The monitoring device shall have an accuracy of ±5 percent over its operating range.

**§ 60.374 Test methods and procedures.**

(a) In conducting the performance tests required in §60.8, the owner or operator shall use as reference methods and procedures the test methods in appendix A of this part or other methods and procedures as specified in this section, except as provided in §60.8(b).

(b) The owner or operator shall determine compliance with the lead standards in §60.372, except §60.372(a)(4), as follows:

(1) Method 12 shall be used to determine the lead concentration and, if applicable, the volumetric flow rate ( $Q_{sda}$ ) of the effluent gas. The sampling time and sample volume for each run shall be at least 60 minutes and 0.85 dscm (30 dscf).

(2) When different operations in a three-process operation facility are ducted to separate control devices, the lead emission concentration (C) from the facility shall be determined as follows:

$$C = \left[ \sum_{a=1}^n (C_s Q_{sda}) \right] / \sum_{a=1}^n Q_{sda}$$

where:

C=concentration of lead emissions for the entire facility, mg/dscm (gr/dscf).

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$C_a$ =concentration of lead emissions from facility "a", mg/dscm (gr/dscf).

$Q_{sda}$ =volumetric flow rate of effluent gas from facility "a", dscm/hr (dscf/hr).

N=total number of control devices to which separate operations in the facility are ducted.

(3) Method 9 and the procedures in § 60.11 shall be used to determine opacity. The opacity numbers shall be rounded off to the nearest whole percentage.

(c) The owner or operator shall determine compliance with the lead standard in § 60.372(a)(4) as follows:

(1) The emission rate (E) from lead oxide manufacturing facility shall be computed for each run using the following equation:

$$E = \left( \sum_{i=1}^M C_{Pbi} Q_{sdi} \right) / (PK)$$

where:

E=emission rate of lead, mg/kg (lb/ton) of lead charged.

$C_{Pbi}$ =concentration of lead from emission point "i," mg/dscm.

$Q_{sdi}$ =volumetric flow rate of effluent gas from emission point "i," dscm/hr (dscf/hr).

M=number of emission points in the affected facility.

P=lead feed rate to the facility, kg/hr (ton/hr).

K=conversion factor, 1.0 mg/mg (453,600 mg/lb).

(2) Method 12 shall be used to determine the lead concentration ( $C_{Pb}$ ) and the volumetric flow rate ( $Q_{sd}$ ) of the effluent gas. The sampling time and sample volume for each run shall be at least 60 minutes and 0.85 dscm (30 dscf).

(3) The average lead feed rate (P) shall be determined for each run using the following equation:

$$P = N W / \Theta$$

where:

N=number of lead pigs (ingots) charged.

W=average mass of a pig, kg (ton).

$\Theta$ =duration of run, hr.

[54 FR 6675, Feb. 14, 1989]

**Subpart LL—Standards of Performance for Metallic Mineral Processing Plants**

SOURCE: 49 FR 6464, Feb. 21, 1984, unless otherwise noted.

**40 CFR Ch. I (7-1-99 Edition)**

**§ 60.380 Applicability and designation of affected facility.**

(a) The provisions of this subpart are applicable to the following affected facilities in metallic mineral processing plants: Each crusher and screen in open-pit mines; each crusher, screen, bucket elevator, conveyor belt transfer point, thermal dryer, product packaging station, storage bin, enclosed storage area, truck loading station, truck unloading station, railcar loading station, and railcar unloading station at the mill or concentrator with the following exceptions. All facilities located in underground mines are exempted from the provisions of this subpart. At uranium ore processing plants, all facilities subsequent to and including the beneficiation of uranium ore are exempted from the provisions of this subpart.

(b) An affected facility under paragraph (a) of this section that commences construction or modification after August 24, 1982, is subject to the requirements of this part.

**§ 60.381 Definitions.**

All terms used in this subpart, but not specifically defined in this section, shall have the meaning given them in the Act and in subpart A of this part.

*Bucket elevator* means a conveying device for metallic minerals consisting of a head and foot assembly that supports and drives an endless single or double strand chain or belt to which buckets are attached.

*Capture system* means the equipment used to capture and transport particulate matter generated by one or more affected facilities to a control device.

*Control device* means the air pollution control equipment used to reduce particulate matter emissions released to the atmosphere from one or more affected facilities at a metallic mineral processing plant.

*Conveyor belt transfer point* means a point in the conveying operation where the metallic mineral or metallic mineral concentrate is transferred to or from a conveyor belt except where the metallic mineral is being transferred to a stockpile.