

**§ 60.380**

$C_a$ =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.

*Crusher* means a machine used to crush any metallic mineral and includes feeders or conveyors located immediately below the crushing surfaces. Crushers include, but are not limited to, the following types: jaw, gyratory, cone, and hammermill.

*Enclosed storage area* means any area covered by a roof under which metallic minerals are stored prior to further processing or loading.

*Metallic mineral concentrate* means a material containing metallic compounds in concentrations higher than naturally occurring in ore but requiring additional processing if pure metal is to be isolated. A metallic mineral concentrate contains at least one of the following metals in any of its oxidation states and at a concentration that contributes to the concentrate's commercial value: Aluminum, copper, gold, iron, lead, molybdenum, silver, titanium, tungsten, uranium, zinc, and zirconium. This definition shall not be construed as requiring that material containing metallic compounds be refined to a pure metal in order for the material to be considered a metallic mineral concentrate to be covered by the standards.

*Metallic mineral processing plant* means any combination of equipment that produces metallic mineral concentrates from ore. Metallic mineral processing commences with the mining of ore and includes all operations either up to and including the loading of wet or dry concentrates or solutions of metallic minerals for transfer to facilities at non-adjacent locations that will subsequently process metallic concentrates into purified metals (or other products), or up to and including all material transfer and storage operations that precede the operations that produce refined metals (or other products) from metallic mineral concentrates at facilities adjacent to the metallic mineral processing plant. This definition shall not be construed as requiring that mining of ore be conducted in order for the combination of equipment to be considered a metallic mineral processing plant. (See also the definition of *metallic mineral concentrate*.)

*Process fugitive emissions* means particulate matter emissions from an af-

fected facility that are not collected by a capture system.

*Product packaging station* means the equipment used to fill containers with metallic compounds or metallic mineral concentrates.

*Railcar loading station* means that portion of a metallic mineral processing plant where metallic minerals or metallic mineral concentrates are loaded by a conveying system into railcars.

*Railcar unloading station* means that portion of a metallic mineral processing plant where metallic ore is unloaded from a railcar into a hopper, screen, or crusher.

*Screen* means a device for separating material according to size by passing undersize material through one or more mesh surfaces (screens) in series and retaining oversize material on the mesh surfaces (screens).

*Stack emissions* means the particulate matter captured and released to the atmosphere through a stack, chimney, or flue.

*Storage bin* means a facility for storage (including surge bins and hoppers) or metallic minerals prior to further processing or loading.

*Surface moisture* means water that is not chemically bound to a metallic mineral or metallic mineral concentrate.

*Thermal dryer* means a unit in which the surface moisture content of a metallic mineral or a metallic mineral concentrate is reduced by direct or indirect contact with a heated gas stream.

*Truck loading station* means that portion of a metallic mineral processing plant where metallic minerals or metallic mineral concentrates are loaded by a conveying system into trucks.

*Truck unloading station* means that portion of a metallic mineral processing plant where metallic ore is unloaded from a truck into a hopper, screen, or crusher.

**§ 60.382 Standard for particulate matter.**

(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