

Environmental Protection Agency

§ 60.155

shall be at least 60 minutes and 0.90 dscm (31.8 dscf).

(3) The dry sludge charging rate (S) for each run shall be computed using either of the following equations:

$$S = S_m R_{dm} / \Theta$$

$$S = S_v R_{dv} / K_v \Theta$$

Where:

- S = Charging rate of dry sludge, kg/hr (ton/hr).
- S_m = Total mass of sludge charge, kg (ton).
- R_{dm} = Average mass of dry sludge per unit mass of sludge charged, kg/kg (ton/ton).
- θ = Duration of run, hr.
- S_v = Total volume of sludge charged, m³ (gal).
- R_{dv} = Average mass of dry sludge per unit volume of sludge charged, kg/m³ (lb/gal).
- K_v = Conversion factor, 1 g/g (2,000 lb/ton).

(4) the flow measuring device of §60.153(a)(1) shall be used to determine the total mass (S_m) or volume (S_v) of sludge charged to the incinerator during each run. If the flow measuring device is on a time rate basis, readings shall be taken and recorded at 5-minute intervals during the run and the total charge of sludge shall be computed using the following equations, as applicable:

$$S_m = \sum_{i=1}^n Q_{mi} \theta_i$$

$$S_v = \sum_{i=1}^n \frac{Q_{vi}}{\theta_i}$$

Where:

- S_m = Total mass of sludge charged to the incinerator during the test run.
- S_v = Total volume of sludge charged to the incinerator during the test run.
- Q_{mi} = Average mass flow rate calculated by averaging the flow rates at the beginning and end of each interval "i," kg/hr (ton/hr).
- Q_{vi} = Average volume flow rate calculated by averaging the flow rates at the beginning and end of each interval "i," m³/hr (gal/hr).
- θ_i = Duration of interval "i," hr.

(5) Samples of the sludge charged to the incinerator shall be collected in nonporous jars at the beginning of each run and at approximately 1-hour intervals thereafter until the test ends, and "209 F. Method for Solid and Semisolid Samples" (incorporated by reference—see §60.17) shall be used to determine

dry sludge content of each sample (total solids residue), except that:

- (i) Evaporating dishes shall be ignited to at least 103 °C rather than the 550 °C specified in step 3(a)(1).
- (ii) Determination of volatile residue, step 3(b) may be deleted.
- (iii) The quantity of dry sludge per unit sludge charged shall be determined in terms of kg/m³ (lb/gal) or kg/kg (ton/ton).
- (iv) The average dry sludge content shall be the arithmetic average of all the samples taken during the run.
- (6) Method 9 and the procedures in §60.11 shall be used to determine opacity.

(c) [Reserved]

(d) The owner or operator of any sludge incinerator subject to the provisions of this subpart shall conduct a performance test during which the monitoring and recording devices required under §60.153(a)(1), (b)(1), (b)(2), (b)(3), and (b)(4) are installed and operating and for which the sampling and analysis procedures required under §60.153(b)(5) are performed. The owner or operator shall provide the Administrator at least 30 days prior notice of the performance test to afford the Administrator the opportunity to have an observer present.

(1) For incinerators that commenced construction or modification on or before April 18, 1986, the performance test shall be conducted within 360 days of the effective date of these regulations unless the monitoring and recording devices required under §60.153(a)(1), (b)(1), (b)(2), (b)(3), and (b)(4) were installed and operating and the sampling and analysis procedures required under §60.153(b)(5) were performed during the most recent performance test and a record of the measurements taken during the performance test is available.

(2) For incinerators that commence construction or modification after April 18, 1986, the date of the performance test shall be determined by the requirements in §60.8.

[54 FR 6668, Feb. 14, 1989, as amended at 54 FR 27015, June 27, 1989; 59 FR 5108, Feb. 3, 1994; 65 FR 61756, Oct. 17, 2000]

§ 60.155 Reporting.

(a) The owner or operator of any multiple hearth, fluidized bed, or electric

§ 60.156

40 CFR Ch. I (7-1-04 Edition)

sludge incinerator subject to the provisions of this subpart shall submit to the Administrator semi-annually a report in writing which contains the following:

(1) A record of average scrubber pressure drop measurements for each period of 15 minutes duration or more during which the pressure drop of the scrubber was less than, by a percentage specified below, the average scrubber pressure drop measured during the most recent performance test. The percent reduction in scrubber pressure drop for which a report is required shall be determined as follows:

(i) For incinerators that achieved an average particulate matter emission rate of 0.38 kg/Mg (0.75 lb/ton) dry sludge input or less during the most recent performance test, a scrubber pressure drop reduction of more than 30 percent from the average scrubber pressure drop recorded during the most recent performance test shall be reported.

(ii) For incinerators that achieved an average particulate matter emission rate of greater than 0.38 kg/Mg (0.75 lb/ton) dry sludge input during the most recent performance test, a percent reduction in pressure drop greater than that calculated according to the following equation shall be reported:

$$P = -111E + 72.15$$

where P=Percent reduction in pressure drop, and

E=Average particulate matter emissions (kg/megagram)

(2) A record of average oxygen content in the incinerator exhaust gas for each period of 1-hour duration or more that the oxygen content of the incinerator exhaust gas exceeds the average oxygen content measured during the most recent performance test by more than 3 percent.

(b) The owner or operator of any multiple hearth, fluidized bed, or electric sludge incinerator from which the average particulate matter emission rate measured during the performance test required under §60.154(d) exceeds 0.38 g/kg of dry sludge input (0.75 lb/ton of dry sludge input) shall include in the report for each calendar day that a decrease in scrubber pressure drop or increase in oxygen content of exhaust

gas is reported a record of the following:

(1) Scrubber pressure drop averaged over each 1-hour incinerator operating period.

(2) Oxygen content in the incinerator exhaust averaged over each 1-hour incinerator operating period.

(3) Temperatures of every hearth in multiple hearth incinerators; of the bed and outlet of fluidized bed incinerators; and of the drying, combustion, and cooling zones of electric incinerators averaged over each 1-hour incinerator operating period.

(4) Rate of sludge charged to the incinerator averaged over each 1-hour incinerator operating period.

(5) Incinerator fuel use averaged over each 8-hour incinerator operating period.

(6) Moisture and volatile solids content of the daily grab sample of sludge charged to the incinerator.

(c) The owner or operator of any sludge incinerator other than a multiple hearth, fluidized bed, or electric incinerator or any sludge incinerator equipped with a control device other than a wet scrubber shall include in the semi-annual report a record of control device operation measurements, as specified in the plan approved under §60.153(e).

[53 FR 39417, Oct. 6, 1988]

§ 60.156 Delegation of authority.

(a) In delegating implementation and enforcement authority to a State under section 111(c) of the Act, the authorities contained in paragraph (b) of this section shall be retained by the Administrator and not transferred to a State.

(b) Authorities which will not be delegated to States: §60.153(e).

[53 FR 39418, Oct. 6, 1988]

Subpart P—Standards of Performance for Primary Copper Smelters

SOURCE: 41 FR 2338, Jan. 15, 1976, unless otherwise noted.