

(3) Determine and record the 3-hour block average of the recorded temperature measurements for the 3 test runs.

(o) *Flux injection rate.* The owner or operator must use these procedures to establish an operating parameter value or range for the total reactive chlorine flux injection rate.

(1) Continuously measure and record the weight of gaseous or liquid reactive flux injected for each 15 minute period during the HCl and D/F tests, determine and record the 15-minute block average weights, and calculate and record the total weight of the gaseous or liquid reactive flux for the 3 test runs;

(2) Record the identity, composition, and total weight of each addition of solid reactive flux for the 3 test runs;

(3) Determine the total reactive chlorine flux injection rate by adding the recorded measurement of the total weight of chlorine in the gaseous or liquid reactive flux injected and the total weight of chlorine in the solid reactive flux using Equation 5:

$$W_t = F_1 W_1 + F_2 W_2 \quad (\text{Eq. 5})$$

Where,

$W_t$  = Total chlorine usage, by weight;

$F_1$  = Fraction of gaseous or liquid flux that is chlorine;

$W_1$  = Weight of reactive flux gas injected;

$F_2$  = Fraction of solid reactive chloride flux that is chlorine (*e.g.*,  $F = 0.75$  for magnesium chloride; and

$W_2$  = Weight of solid reactive flux;

(4) Divide the weight of total chlorine usage ( $W_t$ ) for the 3 test runs by the recorded measurement of the total weight of feed for the 3 test runs; and

(5) If a solid reactive flux other than magnesium chloride is used, the owner or operator must derive the appropriate proportion factor subject to approval by the applicable permitting authority.

(p) *Lime injection.* The owner or operator of an affected source or emission unit using a lime-injected fabric filter system must use these procedures during the HCl and D/F tests to establish an operating parameter value for the feeder setting for each operating cycle or time period used in the performance test.

(1) For continuous lime injection systems, ensure that lime in the feed hop-

per or silo is free-flowing at all times; and

(2) Record the feeder setting for the 3 test runs. If the feed rate setting varies during the runs, determine and record the average feed rate from the 3 runs.

(q) *Bag leak detection system.* The owner or operator of an affected source or emission unit using a bag leak detection system must submit the information described in §63.1515(b)(6) as part of the notification of compliance status report to document conformance with the specifications and requirements in §63.1510(f).

(r) *Labeling.* The owner or operator of each scrap dryer/delacquering kiln/decoating kiln, group 1 furnace, group 2 furnace and in-line fluxer must submit the information described in §63.1515(b)(3) as part of the notification of compliance status report to document conformance with the operational standard in §63.1506(b).

(s) *Capture/collection system.* The owner or operator of a new or existing affected source or emission unit with an add-on control device must submit the information described in §63.1515(b)(2) as part of the notification of compliance status report to document conformance with the operational standard in §63.1506(c).

[65 FR 15710, Mar. 23, 2000, as amended at 67 FR 79817, Dec. 30, 2002; 69 FR 53984, Sept. 3, 2004]

**§63.1513 Equations for determining compliance.**

(a) *THC emission limit.* Use Equation 6 to determine compliance with an emission limit for THC:

$$E = \frac{C \times MW \times Q \times K_1 \times K_2}{M_v \times P \times 10^6} \quad (\text{Eq. 6})$$

Where,

$E$  = Emission rate of measured pollutant, kg/Mg (lb/ton) of feed;

$C$  = Measured volume fraction of pollutant, ppmv;

$MW$  = Molecular weight of measured pollutant, g/g-mole (lb/lb-mole): THC (as propane) = 44.11;

$Q$  = Volumetric flow rate of exhaust gases, dscm/hr (dscf/hr);

$K_1$  = Conversion factor, 1 kg/1,000 g (1 lb/lb);

$K_2$  = Conversion factor, 1,000 L/m<sup>3</sup> (1 ft<sup>3</sup>/ft<sup>3</sup>);

$M_v$  = Molar volume, 24.45 L/g-mole (385.3 ft<sup>3</sup>/lb-mole); and

$P$  = Production rate, Mg/hr (ton/hr).

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(b) *PM, HCl and D/F emission limits.* (1) Use Equation 7 of this section to determine compliance with an emission limit for PM or HCl:

$$E = \frac{C \times Q \times K_1}{P} \quad (\text{Eq. 7})$$

Where:

- E = Emission rate of PM or HCl, kg/Mg (lb/ton) of feed;
- C = Concentration of PM or HCl, g/dscm (gr/dscf);
- Q = Volumetric flow rate of exhaust gases, dscm/hr (dscf/hr);
- K<sub>1</sub> = Conversion factor, 1 kg/1,000 g (1 lb/7,000 gr); and
- P = Production rate, Mg/hr (ton/hr).

(2) Use Equation 7A of this section to determine compliance with an emission limit for D/F:

$$E = \frac{C \times Q}{P} \quad (\text{Eq. 7A})$$

Where:

- E = Emission rate of D/F, µg/Mg (gr/ton) of feed;
- C = Concentration of D/F, µg/dscm (gr/dscf);
- Q = Volumetric flow rate of exhaust gases, dscm/hr (dscf/hr); and
- P = Production rate, Mg/hr (ton/hr).

(c) *HCl percent reduction standard.* Use Equation 8 to determine compliance with an HCl percent reduction standard:

$$\%R = \frac{L_i - L_o}{L_i} \times 100 \quad (\text{Eq. 8})$$

Where,

- %R = Percent reduction of the control device;
- L<sub>i</sub> = Inlet loading of pollutant, kg/Mg (lb/ton); and
- L<sub>o</sub> = Outlet loading of pollutant, kg/Mg (lb/ton).

(d) *Conversion of D/F measurements to TEQ units.* To convert D/F measurements to TEQ units, the owner or operator must use the procedures and equations in "Interim Procedures for Estimating Risks Associated with Exposures to Mixtures of Chlorinated Dibenzo-p-Dioxins and -Dibenzofurans (CDDs and CDFs) and 1989 Update" (EPA-625/3-89-016), incorporated by reference in § 63.1502 of this subpart, available from the National Technical Information Service (NTIS), 5285 Port Royal

Road, Springfield, Virginia, NTIS no. PB 90-145756.

(e) *Secondary aluminum processing unit.* Use the procedures in paragraphs (e)(1), (2), and (3) or the procedure in paragraph (e)(4) of this section to determine compliance with emission limits for a secondary aluminum processing unit.

(1) Use Equation 9 to compute the mass-weighted PM emissions for a secondary aluminum processing unit. Compliance is achieved if the mass-weighted emissions for the secondary aluminum processing unit (E<sub>C-PM</sub>) is less than or equal to the emission limit for the secondary aluminum processing unit (L<sub>C-PM</sub>) calculated using Equation 1 in § 63.1505(k).

$$E_{C-PM} = \frac{\sum_{i=1}^n (E_{ti-PM} \times T_{ti})}{\sum_{i=1}^n (T_{ti})} \quad (\text{Eq. 9})$$

Where,

- E<sub>C-PM</sub> = The mass-weighted PM emissions for the secondary aluminum processing unit;
- E<sub>ti-PM</sub> = Measured PM emissions for individual emission unit i;
- T<sub>ti</sub> = The average feed rate for individual emission unit i during the operating cycle or performance test period; and
- n = The number of emission units in the secondary aluminum processing unit.

(2) Use Equation 10 to compute the aluminum mass-weighted HCl emissions for the secondary aluminum processing unit. Compliance is achieved if the mass-weighted emissions for the secondary aluminum processing unit (E<sub>C-HCl</sub>) is less than or equal to the emission limit for the secondary aluminum processing unit (L<sub>C-HCl</sub>) calculated using Equation 2 in § 63.1505(k).

$$E_{C-HCl} = \frac{\sum_{i=1}^n (E_{ti-HCl} \times T_{ti})}{\sum_{i=1}^n (T_{ti})} \quad (\text{Eq. 10})$$

Where,

- E<sub>C-HCl</sub> = The mass-weighted HCl emissions for the secondary aluminum processing unit; and
- E<sub>ti-HCl</sub> = Measured HCl emissions for individual emission unit i.

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(3) Use Equation 11 to compute the aluminum mass-weighted D/F emissions for the secondary aluminum processing unit. Compliance is achieved if the mass-weighted emissions for the secondary aluminum processing unit is less than or equal to the emission limit for the secondary aluminum processing unit ( $L_{cD/F}$ ) calculated using Equation 3 in § 63.1505(k).

$$E_{cD/F} = \frac{\sum_{i=1}^n (E_{tiD/F} \times T_{ti})}{\sum_{i=1}^n (T_{ti})} \quad (\text{Eq. 11})$$

Where,

$E_{cD/F}$  = The mass-weighted D/F emissions for the secondary aluminum processing unit; and

$E_{tiD/F}$  = Measured D/F emissions for individual emission unit  $i$ .

(4) As an alternative to using the equations in paragraphs (e)(1), (2), and (3) of this section, the owner or operator may demonstrate compliance for a secondary aluminum processing unit by demonstrating that each existing group 1 furnace is in compliance with the emission limits for a new group 1 furnace in § 63.1505(i) and that each existing in-line fluxer is in compliance with the emission limits for a new in-line fluxer in § 63.1505(j).

[65 FR 15710, Mar. 23, 2000, as amended at 69 FR 53984, Sept. 3, 2004]

**§ 63.1514 [Reserved]**

**NOTIFICATIONS, REPORTS, AND RECORDS**

**§ 63.1515 Notifications.**

(a) *Initial notifications.* The owner or operator must submit initial notifications to the applicable permitting authority as described in paragraphs (a)(1) through (7) of this section.

(1) As required by § 63.9(b)(1), the owner or operator must provide notification for an area source that subsequently increases its emissions such that the source is a major source subject to the standard.

(2) As required by § 63.9(b)(3), the owner or operator of a new or reconstructed affected source, or a source that has been reconstructed such that it is an affected source, that has an ini-

tial startup after the effective date of this subpart and for which an application for approval of construction or reconstruction is not required under § 63.5(d), must provide notification that the source is subject to the standard.

(3) As required by § 63.9(b)(4), the owner or operator of a new or reconstructed major affected source that has an initial startup after the effective date of this subpart and for which an application for approval of construction or reconstruction is required by § 63.5(d) must provide the following notifications:

(i) Intention to construct a new major affected source, reconstruct a major source, or reconstruct a major source such that the source becomes a major affected source;

(ii) Date when construction or reconstruction was commenced (submitted simultaneously with the application for approval of construction or reconstruction if construction or reconstruction was commenced before the effective date of this subpart, or no later than 30 days after the date construction or reconstruction commenced if construction or reconstruction commenced after the effective date of this subpart);

(iii) Anticipated date of startup; and

(iv) Actual date of startup.

(4) As required by § 63.9(b)(5), after the effective date of this subpart, an owner or operator who intends to construct a new affected source or reconstruct an affected source subject to this subpart, or reconstruct a source such that it becomes an affected source subject to this subpart, must provide notification of the intended construction or reconstruction. The notification must include all the information required for an application for approval of construction or reconstruction as required by § 63.5(d). For major sources, the application for approval of construction or reconstruction may be used to fulfill these requirements.

(i) The application must be submitted as soon as practicable before the construction or reconstruction is planned to commence (but no sooner than the effective date) if the construction or reconstruction commences after the effective date of this subpart; or