

Environmental Protection Agency

§ 98.65

44/12 = Ratio of molecular weights, CO₂ to carbon.

(2) Use Equation F-8 of this section to calculate emissions from bake furnace packing material.

$$E_{\text{CO}_2\text{PC}} = \text{PCC} \times \text{BA} \times \left(\left[100 - S_{\text{pc}} - \text{Ash}_{\text{pc}} \right] / 100 \right) \times (44/12) \quad (\text{Eq. F-8})$$

Where:

$E_{\text{CO}_2\text{PC}}$ = Annual CO₂ emissions from bake furnace packing material (metric tons CO₂).

PCC = Annual packing coke consumption (metric tons/metric ton baked anode).

BA = Annual baked anode production (metric tons).

S_{pc} = Sulfur content in packing coke (percent weight).

Ash_{pc} = Ash content in packing coke (percent weight).

44/12 = Ratio of molecular weights, CO₂ to carbon.

(g) If process CO₂ emissions from anode consumption during electrolysis or anode baking of prebake cells are vented through the same stack as any combustion unit or process equipment that reports CO₂ emissions using a CEMS that complies with the Tier 4 Calculation Methodology in subpart C of this part (General Stationary Fuel Combustion Sources), then the calculation methodology in paragraphs (d) and (e) of this section shall not be used to calculate those process emissions. The owner or operation shall report under this subpart the combined stack emissions according to the Tier 4 Calculation Methodology in § 98.33(a)(4) and all associated requirements for Tier 4 in subpart C of this part (General Stationary Fuel Combustion Sources).

[74 FR 56374, Oct. 30, 2009, as amended at 75 FR 79155, Dec. 17, 2010]

§ 98.64 Monitoring and QA/QC requirements.

(a) Effective December 31, 2010 for smelters with no prior measurement or effective December 31, 2012, for facilities with historic measurements, the smelter-specific slope coefficients, overvoltage emission factors, and weight fractions used in Equations F-2, F-3, and F-4 of this subpart must be measured in accordance with the recommendations of the EPA/IAI Protocol for Measurement of

Tetrafluoromethane (CF₄) and Hexafluoroethane (C₂F₆) Emissions from Primary Aluminum Production (2008) (incorporated by reference, see § 98.7), except the minimum frequency of measurement shall be every 10 years unless a change occurs in the control algorithm that affects the mix of types of anode effects or the nature of the anode effect termination routine. Facilities which operate at less than 0.2 anode effect minutes per cell day or operate with less than 1.4mV anode effect overvoltage can use either smelter-specific slope coefficients or the technology specific default values in Table F-1 of this subpart.

(b) The minimum frequency of the measurement and analysis is annually except as follows:

(1) Monthly for anode effect minutes per cell day (or anode effect overvoltage and current efficiency).

(2) Monthly for aluminum production.

(3) Smelter-specific slope coefficients, overvoltage emission factors, and weight fractions according to paragraph (a) of this section.

(c) Sources may use either smelter-specific values from annual measurements of parameters needed to complete the equations in § 98.63 (e.g., sulfur, ash, and hydrogen contents) or the default values shown in Table F-2 of this subpart.

[74 FR 56374, Oct. 30, 2009, as amended at 75 FR 79155, Dec. 17, 2010]

§ 98.65 Procedures for estimating missing data.

A complete record of all measured parameters used in the GHG emissions calculations is required. Therefore, whenever a quality-assured value of a required parameter is unavailable (e.g., if a meter malfunctions during unit operation or if a required sample measurement is not taken), a substitute