§ 98.64

associated requirements for Tier 4 in subpart C of this part (General Stationary Fuel Combustion Sources).

§ 98.64 Monitoring and QA/QC requirements.

(a) Effective one year after publication of the rule for smelters with no prior measurement or effective three years after publication for facilities with historic measurements, the smelter-specific slope coefficients 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 (CF_4) and Hexafluoroethane (C_2F_6) Emissions from Primary Aluminum Production (2008), 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: Monthly—anode effect minutes per cell day (or anode effect overvoltage and current efficiency), production.

(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.

§ 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 data value for the missing parameter shall be used in the calculations, according to the following requirements:

(a) Where anode or paste consumption data are missing, CO_2 emissions can be estimated from aluminum production using Tier 1 method per Equation F-8 of this section.

$$ECO_2 = EF_p \times MP_p + EF_s \times MP_s$$
 (Eq. F-8)

Where:

 $ECO_2 = CO_2$ emissions from anode and/or paste consumption, metric tons CO_2 .

EF_p = Prebake technology specific emission factor (1.6 metric tons CO₂/metric ton aluminum produced).

 MP_p = Metal production from prebake process (metric tons Al).

EF_s = Sderberg technology specific emission factor (1.7 metric tons CO₂/metric ton Al produced).

MP_s = Metal production from Sderberg process (metric tons Al).

(b) For other parameters, use the average of the two most recent data points after the missing data.

§ 98.66 Data reporting requirements.

In addition to the information required by §98.3(c), you must report the

following information at the facility level:

- (a) Annual aluminum production in metric tons.
- (b) Type of smelter technology used.
- (c) The following PFC-specific information on an annual basis:
- (1) Perfluoromethane emissions and perfluoroethane emissions from anode effects in all prebake and all Sderberg electolysis cells combined.
- (2) Anode effect minutes per cell-day (AE-mins/cell-day), anode effect frequency (AE/cell-day), anode effect duration (minutes). (Or anode effect overvoltage factor ((kg CF4/metric ton Al)/(mV/cell day)), potline overvoltage (mV/cell day), current efficiency (%).)
- (3) Smelter-specific slope coefficients (or overvoltage emission factors) and