

gases, the flow rate of the organic HAP emission stream, and if applicable, the desorption schedule, the regeneration stream pressure or temperature, and the flow rate of the regeneration stream. For vacuum desorption, the pressure drop shall be included; and

(vi) For condensers, the design evaluation shall include the final temperature of the organic HAP vapors, the type of condenser, and the design flow rate of the organic HAP emission stream.

(3) If a performance test is conducted, the owner or operator shall determine the control efficiency for POM during tank loading using Method 315 in appendix A to this part. The owner or operator shall include the following information:

(i) Identification of the pitch storage tank and control device for which the performance test will be submitted; and

(ii) Identification of the emission point(s) that share the control device with the pitch storage tank and for which the performance test will be conducted.

(h) *Selection of monitoring parameters.* The owner or operator shall determine the operating limits and monitoring frequency for each control device that is to be monitored as required in § 63.848(f).

(1) For potlines and anode bake furnaces, the owner or operator shall determine upper and/or lower operating limits, as appropriate, for each monitoring device for the emission control system from the values recorded during each of the runs performed during the initial performance test and from historical data from previous performance tests conducted by the methods specified in this subpart.

(2) For a paste production plant, the owner or operator shall specify and provide the basis or rationale for selecting parameters to be monitored and the associated operating limits for the emission control device.

(3) The owner or operator may redetermine the upper and/or lower operating limits, as appropriate, based on historical data or other information and submit an application to the applicable regulatory authority to change the applicable limit(s). The redeter-

mined limits shall become effective upon approval by the applicable regulatory authority.

§ 63.848 Emission monitoring requirements.

(a) *TF emissions from potlines.* Using the procedures in § 63.847 and in the approved test plan, the owner or operator shall monitor emissions of TF from each potline by conducting monthly performance tests. The owner or operator shall compute and record the monthly average from at least three runs for secondary emissions and the previous 12-month average of all runs for the primary control system to determine compliance with the applicable emission limit. The owner or operator must include all valid runs in the monthly average. The duration of each run for secondary emissions must represent a complete operating cycle.

(b) *POM emissions from Soderberg potlines.* Using the procedures in § 63.847 and in the approved test plan, the owner or operator shall monitor emissions of POM from each Soderberg (HSS, VSS1, and VSS2) potline every three months. The owner or operator shall compute and record the quarterly (3-month) average from at least one run per month for secondary emissions and the previous 12-month average of all runs for the primary control systems to determine compliance with the applicable emission limit. The owner or operator must include all valid runs in the quarterly (3-month) average. The duration of each run for secondary emissions must represent a complete operating cycle. The primary control system must be sampled over an 8-hour period, unless site-specific factors dictate an alternative sampling time subject to the approval of the regulatory authority.

(c) *TF and POM emissions from anode bake furnaces.* Using the procedures in § 63.847 and in the approved test plan, the owner or operator shall monitor TF and POM emissions from each anode bake furnace on an annual basis. The owner or operator shall compute and record the annual average of TF and POM emissions from at least three runs to determine compliance with the applicable emission limits. The owner

or operator must include all valid runs in the annual average.

(d) *Similar potlines.* As an alternative to monthly monitoring of TF or POM secondary emissions from each potline using the test methods in §63.849, the owner or operator may perform monthly monitoring of TF or POM secondary emissions from one potline using the test methods in §§63.849 (a) or (b) to represent the performance of similar potline(s). The similar potline(s) shall be monitored using an alternative method that meets the requirements of paragraphs (d)(1) through (d)(7) of this section. Two or more potlines are similar if the owner or operator demonstrates that their structure, operability, type of emissions, volume of emissions, and concentration of emissions are substantially equivalent.

(1) To demonstrate (to the satisfaction of the regulatory authority) that the level of emission control performance is the same or better, the owner or operator shall perform an emission test using an alternative monitoring procedure for the similar potline simultaneously with an emission test using the applicable test methods. The results of the emission test using the applicable test methods must be in compliance with the applicable emission limit for existing or new potlines in §§63.843 or 63.844. An alternative method:

(i) For TF emissions, must account for or include gaseous fluoride and cannot be based on measurement of particulate matter or particulate fluoride alone; and

(ii) For TF and POM emissions, must meet or exceed Method 14 criteria.

(2) An HF continuous emission monitoring system is an approved alternative for the monitoring of TF secondary emissions.

(3) An owner or operator electing to use an alternative monitoring procedure shall establish an alternative emission limit based on at least nine simultaneous runs using the applicable test methods and the alternative monitoring method. All runs must represent a full process cycle.

(4) The owner or operator shall derive an alternative emission limit for the HF continuous emission monitor or an

alternative method using either of the following procedures:

(i) Use the highest value from the alternative method associated with a simultaneous run by the applicable test method that does not exceed the applicable emission limit; or

(ii) Correlate the results of the two methods (the applicable test method results and the alternative monitoring method results) and establish an emission limit for the alternative monitoring system that corresponds to the applicable emission limit.

(5) The owner or operator shall submit the results required in paragraph (d)(4) of this section and all supporting documentation to the applicable regulatory authority for review and approval.

(6) The regulatory authority shall review and approve or disapprove the request for an alternative method and alternative emission limit. The criterion for approval shall be a demonstration (to the satisfaction of the regulatory authority) that the alternative method and alternative emission limit achieve a level of emission control that is the same as or better than the level that would have otherwise been achieved by the applicable method and emission limit.

(7) If the alternative method is approved by the applicable regulatory authority, the owner or operator shall perform monthly emission monitoring using the approved alternative monitoring procedure to demonstrate compliance with the alternative emission limit for each similar potline.

(e) *Reduced sampling frequency.* The owner or operator may submit a written request to the applicable regulatory authority to establish an alternative testing requirement to reduce the sampling of secondary TF emissions from potlines from monthly to quarterly.

(1) In the request, the owner or operator shall provide information and data demonstrating, to the satisfaction of the applicable regulatory authority, that secondary emissions of TF from potlines have low variability during normal operations using the procedures in paragraphs (e)(1)(i) or (e)(1)(ii) of this section.

(i) Submit data from 24 consecutive months of sampling that show the average TF emissions are less than 60 percent of the applicable limit and that no monthly performance test in the 24 months of sampling exceeds 75 percent of the applicable limit; or

(ii) Submit data and a statistical analysis that the regulatory authority may evaluate based on the approach used in "Primary Aluminum: Statistical Analysis of Potline Fluoride Emissions and Alternative Sampling Frequency" (EPA-450-86-012, October 1986), which is available from the National Technical Information Service (NTIS), 5285 Port Royal Road, Springfield, VA 22161.

(2) An approved alternative requirement must include a test schedule and the method to be used to measure emissions for performance tests.

(3) The owner or operator of a plant that has received approval of an alternative sampling frequency under §60.194 of this chapter is deemed to have approval of the alternative sampling frequency under this subpart.

(4) If emissions in excess of the applicable TF limit occur while performing quarterly sampling approved under paragraph (e)(1)(i) of this section, the owner or operator shall return to monthly sampling for at least 12 months and may reduce to quarterly sampling when:

(i) The average of all tests performed over the most recent 24-month period does not exceed 60 percent of the applicable limit, and

(ii) No more than one monthly performance test in the most recent 24-month period exceeds 75 percent of the applicable limit.

(5) If emissions in excess of the applicable TF limit occur while performing quarterly sampling approved under paragraph (e)(1)(ii) of this section, the owner or operator shall immediately return to the monthly sampling schedule required by paragraph (a) of this section until another request for an alternative sampling frequency is approved by the applicable regulatory authority.

(f) *Monitoring parameters for emission control devices.* The owner or operator shall install, operate, calibrate, and maintain a continuous parameter mon-

itoring system for each emission control device. The owner or operator shall submit for approval by the regulatory authority a description of the parameter(s) to be monitored, the operating limits, and the monitoring frequency to ensure that the control device is being properly operated and maintained. An explanation of the criteria used for selection of the parameter(s), the operating limits, and the monitoring frequency, including how these relate to emission control also shall be submitted to the regulatory authority. Except as provided in paragraph (l) of this section, the following monitoring devices shall be installed:

(1) For dry alumina scrubbers, devices for the measurement of alumina flow and air flow;

(2) For dry coke scrubbers, devices for the measurement of coke flow and air flow;

(3) For wet scrubbers as the primary control system, devices for the measurement of water flow and air flow;

(4) For electrostatic precipitators, devices for the measurement of voltage and secondary current; and

(5) For wet roof scrubbers for secondary emission control:

(i) A device for the measurement of total water flow; and

(ii) The owner or operator shall inspect each control device at least once each operating day to ensure the control device is operating properly and record the results of each inspection.

(g) *Visible emissions.* The owner or operator shall visually inspect the exhaust stack(s) of each control device on a daily basis for evidence of any visible emissions indicating abnormal operation.

(h) *Corrective action.* If a monitoring device for a primary control device measures an operating parameter outside the limit(s) established pursuant to §63.847(h), if visible emissions indicating abnormal operation are observed from the exhaust stack of a control device during a daily inspection, or if a problem is detected during the daily inspection of a wet roof scrubber for potline secondary emission control, the owner or operator shall initiate the corrective action procedures identified

in the startup, shutdown, and malfunction plan within 1 hour. Failure to initiate the corrective action procedures within 1 hour or to take the necessary corrective actions to remedy the problem is a violation.

(i) *Exceedances.* If the limit for a given operating parameter associated with monitoring a specific control device is exceeded six times in any semi-annual reporting period, then any subsequent exceedance in that reporting period is a violation. For the purpose of determining the number of exceedances, no more than one exceedance shall be attributed in any given 24-hour period.

(j) *Weight of aluminum and green anodes.* The owner or operator of a new or existing potline or anode bake furnace shall install, operate, and maintain a monitoring device to determine the daily weight of aluminum produced and the weight of green anode material placed in the anode bake furnace. The weight of green anode material may be determined by monitoring the weight of all anodes or by monitoring the number of anodes placed in the furnace and determining an average weight from measurements of a representative sample of anodes.

(k) *Accuracy and calibration.* The owner or operator shall submit recommended accuracy requirements to the regulatory authority for review and approval. All monitoring devices required by this section must be certified by the owner or operator to meet the accuracy requirements and must be calibrated in accordance with the manufacturer's instructions.

(l) *Alternative operating parameters.* The owner or operator may monitor alternative control device operating parameters subject to prior written approval by the applicable regulatory authority.

(m) *Other control systems.* An owner or operator using a control system not identified in this section shall request that the applicable regulatory authority include the recommended parameters for monitoring in the facility's part 70 permit.

§ 63.849 Test methods and procedures.

(a) The owner or operator shall use the following reference methods to de-

termine compliance with the applicable emission limits for TF and POM emissions:

(1) Method 1 in appendix A to part 60 of this chapter for sample and velocity traverses;

(2) Method 2 in appendix A to part 60 of this chapter for velocity and volumetric flow rate;

(3) Method 3 in appendix A to part 60 of this chapter for gas analysis;

(4) Method 13A or Method 13B in appendix A to part 60 of this chapter, or an approved alternative, for the concentration of TF where stack or duct emissions are sampled;

(5) Method 13A or Method 13B and Method 14 or Method 14A in appendix A to part 60 of this chapter or an approved alternative method for the concentration of TF where emissions are sampled from roof monitors not employing wet roof scrubbers;

(6) Method 315 in appendix A to this part or an approved alternative method for the concentration of POM where stack or duct emissions are sampled; and

(7) Method 315 in appendix A to this part and Method 14 in appendix A to part 60 of this chapter or an approved alternative method for the concentration of POM where emissions are sampled from roof monitors not employing wet roof scrubbers.

(b) The owner or operator of a VSS potline or a SWPB potline equipped with wet roof scrubbers for the control of secondary emissions shall use methods that meet the intent of the sampling requirements of Method 14 in appendix A to part 60 of this chapter and that are approved by the State. Sample analysis shall be performed using Method 13A or Method 13B in appendix A to part 60 of this chapter for TF, Method 315 in appendix A to this part for POM, or an approved alternative method.

(c) Except as provided in § 63.845(g)(1), references to "potroom" or "potroom group" in Method 14 in appendix A to part 60 of this chapter shall be interpreted as "potline" for the purposes of this subpart.

(d) For sampling using Method 14 in appendix A to part 60 of this chapter, the owner or operator shall install one Method 14 manifold per potline in a