

§ 63.1161

40 CFR Ch. I (7-1-00 Edition)

(iii) Require cleaning of the scrubber internals and mist eliminators at intervals sufficient to prevent buildup of solids or other fouling;

(iv) Require an inspection of each scrubber at intervals of no less than 3 months with:

(A) Cleaning or replacement of any plugged spray nozzles or other liquid delivery devices;

(B) Repair or replacement of missing, misaligned, or damaged baffles, trays, or other internal components;

(C) Repair or replacement of droplet eliminator elements as needed;

(D) Repair or replacement of heat exchanger elements used to control the temperature of fluids entering or leaving the scrubber; and

(E) Adjustment of damper settings for consistency with the required air flow.

(v) If the scrubber is not equipped with a viewport or access hatch allowing visual inspection, alternate means of inspection approved by the Administrator may be used.

(vi) The owner or operator shall initiate procedures for corrective action within 1 working day of detection of an operating problem and complete all corrective actions as soon as practicable. Procedures to be initiated are the applicable actions that are specified in the maintenance plan. Failure to initiate or provide appropriate repair, replacement, or other corrective action is a violation of the maintenance requirement of this subpart.

(vii) The owner or operator shall maintain a record of each inspection, including each item identified in paragraph (b)(2)(iv) of this section, that is signed by the responsible maintenance official and that shows the date of each inspection, the problem identified, a description of the repair, replacement, or other corrective action taken, and the date of the repair, replacement, or other corrective action taken.

(3) The owner or operator of each hydrochloric acid regeneration plant shall develop and implement a written maintenance program. The program shall require:

(i) Performance of the manufacturer's recommended maintenance at the recommended intervals on all required systems and components;

(ii) Initiation of procedures for appropriate and timely repair, replacement, or other corrective action within 1 working day of detection; and

(iii) Maintenance of a daily record, signed by a responsible maintenance official, showing the date of each inspection for each requirement, the problems found, a description of the repair, replacement, or other action taken, and the date of repair or replacement.

§ 63.1161 Performance testing and test methods.

(a) *Demonstration of compliance.* The owner or operator shall conduct an initial performance test for each process or emission control device to determine and demonstrate compliance with the applicable emission limitation according to the requirements in § 63.7 of subpart A of this part and in this section.

(1) Following approval of the site-specific test plan, the owner or operator shall conduct a performance test for each process or control device to either measure simultaneously the mass flows of HCl at the inlet and the outlet of the control device (to determine compliance with the applicable collection efficiency standard) or measure the concentration of HCl (and Cl₂ for hydrochloric acid regeneration plants) in gases exiting the process or the emission control device (to determine compliance with the applicable emission concentration standard).

(2) Compliance with the applicable concentration standard or collection efficiency standard shall be determined by the average of three consecutive runs or by the average of any three of four consecutive runs. Each run shall be conducted under conditions representative of normal process operations.

(3) Compliance is achieved if either the average collection efficiency as determined by the HCl mass flows at the control device inlet and outlet is greater than or equal to the applicable collection efficiency standard, or the average measured concentration of HCl or Cl₂ exiting the process or the emission control device is less than or equal to the applicable emission concentration standard.

(b) *Establishment of scrubber operating parameters.* During the performance test for each emission control device, the owner or operator using a wet scrubber to achieve compliance shall establish site-specific operating parameter values for the minimum scrubber makeup water flow rate and, for scrubbers that operate with recirculation, the minimum recirculation water flow rate. During the emission test, each operating parameter must be monitored continuously and recorded with sufficient frequency to establish a representative average value for that parameter, but no less frequently than once every 15 minutes. The owner or operator shall determine the operating parameter monitoring values as the averages of the values recorded during any of the runs for which results are used to establish the emission concentration or collection efficiency per paragraph (a)(2) of this section. An owner or operator may conduct multiple performance tests to establish alternative compliant operating parameter values. Also, an owner or operator may reestablish compliant operating parameter values as part of any performance test that is conducted subsequent to the initial test or tests.

(c) *Establishment of hydrochloric acid regeneration plant operating parameters.* (1) During the performance test for hydrochloric acid regeneration plants, the owner or operator shall establish site-specific operating parameter values for the minimum process offgas temperature and the maximum proportion of excess air fed to the process as described in § 63.1162(b)(1) of this subpart. During the emission test, each operating parameter must be monitored and recorded with sufficient frequency to establish a representative average value for that parameter, but no less frequently than once every 15 minutes for parameters that are monitored continuously. Amount of iron in the spent pickle liquor shall be determined for each run by sampling the liquor every 15 minutes and analyzing a composite of the samples. The owner or operator shall determine the compliant monitoring values as the averages of the values recorded during any of the runs for which results are used to establish the emission concentration per

paragraph (a)(2) of this section. An owner or operator may conduct multiple performance tests to establish alternative compliant operating parameter values. Also, an owner or operator may reestablish compliant operating parameter values as part of any performance test that is conducted subsequent to the initial test or tests.

(2) During this performance test, the owner or operator of an existing affected plant may establish an alternative concentration standard if the owner or operator can demonstrate to the Administrator's satisfaction that the plant cannot meet a concentration limitation for Cl_2 of 6 ppmv when operated within its design parameters. The alternative concentration standard shall be established through performance testing while the plant is operated at maximum design temperature and with the minimum proportion of excess air that allows production of iron oxide of acceptable quality while measuring the Cl_2 concentration in the process exhaust gas. The measured concentration shall be the concentration standard for that plant.

(d) *Test methods.* (1) The following test methods in appendix A of 40 CFR part 60 shall be used to determine compliance under § 63.1157(a), § 63.1157(b), § 63.1158(a), and § 63.1158(b) of this subpart:

(i) Method 1, to determine the number and location of sampling points, with the exception that no traverse point shall be within one inch of the stack or duct wall;

(ii) Method 2, to determine gas velocity and volumetric flow rate;

(iii) Method 3, to determine the molecular weight of the stack gas;

(iv) Method 4, to determine the moisture content of the stack gas; and

(v) Method 26A, "Determination of Hydrogen Halide and Halogen Emissions from Stationary Sources—Isokinetic Method," to determine the HCl mass flows at the inlet and outlet of a control device or the concentration of HCl discharged to the atmosphere, and also to determine the concentration of Cl_2 discharged to the atmosphere from acid regeneration plants. If compliance with a collection

efficiency standard is being demonstrated, inlet and outlet measurements shall be performed simultaneously. The minimum sampling time for each run shall be 60 minutes and the minimum sample volume 0.85 dry standard cubic meters (30 dry standard cubic feet). The concentrations of HCl and Cl₂ shall be calculated for each run as follows:

$$C_{\text{HCl}}(\text{ppmv}) = 0.659 C_{\text{HCl}}(\text{mg/dscm}),$$

$$\text{and } C_{\text{Cl}_2}(\text{ppmv}) = 0.339 C_{\text{Cl}_2}(\text{mg/dscm}),$$

where C(ppmv) is concentration in ppmv and C(mg/dscm) is concentration in milligrams per dry standard cubic meter as calculated by the procedure given in Method 26A.

(2) The owner or operator may use equivalent alternative measurement methods approved by the Administrator.

§ 63.1162 Monitoring requirements.

(a) The owner or operator of a new, reconstructed, or existing steel pickling facility or acid regeneration plant subject to this subpart shall:

(1) Conduct performance tests to measure the HCl mass flows at the control device inlet and outlet or the control device according to the procedures described in § 63.1161 of this subpart. Performance tests shall be conducted either annually or according to an alternative schedule that is approved by the applicable permitting authority, but no less frequently than every 2½ years or twice per title V permit term. If any performance test shows that the HCl emission limitation is being exceeded, then the owner or operator is in violation of the emission limit.

(2) In addition to conducting performance tests, if a wet scrubber is used as the emission control device, install, operate, and maintain systems for the measurement and recording of the scrubber makeup water flow rate and, if required, recirculation water flow rate. These flow rates must be monitored continuously and recorded at least once per shift while the scrubber is operating. Operation of the wet scrubber with excursions of scrubber makeup water flow rate and recirculation water flow rate less than the minimum values established during the

performance test or tests will require initiation of corrective action as specified by the maintenance requirements in § 63.1160(b)(2) of this subpart.

(3) If an emission control device other than a wet scrubber is used, install, operate, and maintain systems for the measurement and recording of the appropriate operating parameters.

(4) Failure to record each of the operating parameters listed in paragraph (a)(2) of this section is a violation of the monitoring requirements of this subpart.

(5) Each monitoring device shall be certified by the manufacturer to be accurate to within 5 percent and shall be calibrated in accordance with the manufacturer's instructions but not less frequently than once per year.

(6) The owner or operator may develop and implement alternative monitoring requirements subject to approval by the Administrator.

(b) The owner or operator of a new, reconstructed, or existing acid regeneration plant subject to this subpart shall also install, operate, and maintain systems for the measurement and recording of the:

(1) Process offgas temperature, which shall be monitored continuously and recorded at least once every shift while the facility is operating in production mode; and

(2) Parameters from which proportion of excess air is determined. Proportion of excess air shall be determined by a combination of total air flow rate, fuel flow rate, spent pickle liquor addition rate, and amount of iron in the spent pickle liquor, or by any other combination of parameters approved by the Administrator in accordance with § 63.8(f) of subpart A of this part. Proportion of excess air shall be determined and recorded at least once every shift while the plant is operating in production mode.

(3) Each monitoring device must be certified by the manufacturer to be accurate to within 5 percent and must be calibrated in accordance with the manufacturer's instructions but not less frequently than once per year.

(4) Operation of the plant with the process offgas temperature lower than the value established during performance testing or with the proportion of