

Environmental Protection Agency

§ 63.9622

from each emission unit within each group of similar units.

(C) Using the data from paragraphs (b)(3)(ii)(A) and (B) of this section, calculate the flow-weighted mean concentration of particulate matter emissions from the affected source using Equation 3 of this section.

$$C_a = \frac{\sum_{k=1}^m (C_k * Q_k)}{\sum_{k=1}^m Q_k} \quad (\text{Eq. 3})$$

Where:

C_a = Flow-weighted mean concentration of particulate matter for all emission units within affected source, gr/dscf;

C_k = Average particulate matter concentration measured during the performance test from the representative emission unit in group "k" of affected source "a," as determined using Equation 1 of this section, gr/dscf;

Q_k = Sum of the maximum operating volumetric flow rates of stack gas from all similar emission units within group "k" of affected source, dscf/hr; and

m = Number of similar emission unit groups in affected source.

(c) For each ore dryer affected source and each indurating furnace affected source, you must determine compliance with the applicable emission limit for particulate matter in Table 1 to this subpart by following the test methods and procedures in paragraphs (c)(1) through (3) of this section.

(1) Determine the concentration of particulate matter for each stack according to the test methods in 40 CFR part 60, appendix A. The applicable test methods are listed in paragraphs (c)(1)(i) through (v) of this section.

(i) Method 1 or 1A to select sampling port locations and the number of traverse points. Sampling ports must be located at the outlet of the control device and prior to any releases to the atmosphere.

(ii) Method 2, 2A, 2C, 2D, 2F, or 2G, as applicable, to determine the volumetric flow rate of the stack gas.

(iii) Method 3, 3A, or 3B to determine the dry molecular weight of the stack gas.

(iv) Method 4 to determine the moisture content of the stack gas.

(v) Method 5, 5D, or 17 to determine the concentration of particulate matter.

(2) Each Method 5, 5D, or 17 performance test must consist of three separate runs. Each run must be conducted for a minimum of 2 hours. The average particulate matter concentration from the three runs will be used to determine compliance, as shown in Equation 1 of this section.

(3) For each ore dryer and each indurating furnace with multiple stacks, calculate the flow-weighted mean concentration of particulate matter emissions using Equation 4 of this section.

$$C_b = \frac{\sum_{j=1}^n (C_j * Q_j)}{\sum_{j=1}^n Q_j} \quad (\text{Eq. 4})$$

Where:

C_b = Flow-weighted mean concentration of particulate matter for all stacks associated with affected source, gr/dscf;

C_j = Average particulate matter concentration measured during the performance test from stack "j" in affected source, as determined using Equation 1 of this section, gr/dscf;

Q_j = Average volumetric flow rate of stack gas measured during the performance test from stack "j" in affected source, dscf/hr;

n = Number of stacks associated with affected source.

§ 63.9622 What test methods and other procedures must I use to establish and demonstrate initial compliance with the operating limits?

(a) For wet scrubbers subject to performance testing in §63.9620 and operating limits for pressure drop and scrubber water flow rate in §63.9590(b)(1), you must establish site-specific operating limits according to the procedures in paragraphs (a)(1) through (3) of this section.

(1) Using the CPMS required in §63.9631(b), measure and record the pressure drop and scrubber water flow rate every 15 minutes during each run of the particulate matter performance test.

(2) Calculate and record the average pressure drop and scrubber water flow rate for each individual test run. Your

operating limits are established as the lowest average pressure drop and the lowest average scrubber water flow rate corresponding to any of the three test runs.

(3) If a rod-deck venturi scrubber is applied to an indurating furnace to meet any particulate matter emission limit in Table 1 to this subpart, you may establish a lower average pressure drop operating limit by using historical average pressure drop data from a certified performance test completed on or after December 18, 2002 instead of using the average pressure drop value determined during the initial performance test, as specified in paragraph (a)(2) of this section. If historical average pressure drop data are used to establish an operating limit (*i.e.*, using data from a certified performance test conducted prior to the promulgation date of the final rule), then the average particulate matter concentration corresponding to the historical performance test must be at or below the applicable indurating furnace emission limit, as listed in Table 1 to this subpart.

(b) For dynamic wet scrubbers subject to performance testing in § 63.9620 and operating limits for scrubber water flow rate and either fan amperage or pressure drop in § 63.9590(b)(2), you must establish site-specific operating limits according to the procedures in paragraphs (b)(1) and (2) of this section.

(1) Using the CPMS required in § 63.9631(b), measure and record the scrubber water flow rate and either the fan amperage or pressure drop every 15 minutes during each run of the particulate matter performance test.

(2) Calculate and record the average scrubber water flow rate and either the average fan amperage or average pressure drop for each individual test run. Your operating limits are established as the lowest average scrubber water flow rate and either the lowest average fan amperage or pressure drop value corresponding to any of the three test runs.

(c) For a dry electrostatic precipitator subject to performance testing in § 63.9620 and operating limits in § 63.9590(b)(3), you must establish a site-specific operating limit according to

the procedures in paragraphs (c)(1) or (2) of this section.

(1) If the operating limit for your dry electrostatic precipitator is a 6-minute average opacity of emissions value, then you must follow the requirements in paragraphs (c)(1)(i) through (iii) of this section.

(i) Using the continuous opacity monitoring system (COMS) required in § 63.9631(d)(1), measure and record the opacity of emissions from each control device stack during the particulate matter performance test.

(ii) Compute and record the 6-minute opacity averages from 24 or more data points equally spaced over each 6-minute period (*e.g.*, at 15-second intervals) during the test runs.

(iii) Using the opacity measurements from a performance test that meets the emission limit, determine the opacity value corresponding to the 99 percent upper confidence level of a normal distribution of the 6-minute opacity averages.

(2) If the operating limit for your dry electrostatic precipitator is the daily average secondary voltage and daily average secondary current for each field, then you must follow the requirements in paragraphs (c)(2)(i) and (ii) of this section.

(i) Using the CPMS required in § 63.9631(d)(2), measure and record the secondary voltage and secondary current for each dry electrostatic precipitator field every 15 minutes during each run of the particulate matter performance test.

(ii) Calculate and record the average secondary voltage and secondary current for each dry electrostatic precipitator field for each individual test run. Your operating limits are established as the lowest average secondary voltage and secondary current value for each dry electrostatic precipitator field corresponding to any of the three test runs.

(d) For a wet electrostatic precipitator subject to performance testing in § 63.9620 and operating limit in § 63.9590(b)(4), you must establish a site-specific operating limit according to the procedures in paragraphs (d)(1) and (2) of this section.

(1) Using the CPMS required in § 63.9631(e), measure and record the

parametric values in paragraphs (d)(1)(i) through (iii) of this section for each wet electrostatic precipitator field every 15 minutes during each run of the particulate matter performance test.

- (i) Secondary voltage;
- (ii) Water flow rate; and
- (iii) Stack outlet temperature.

(2) For each individual test run, calculate and record the average value for each operating parameter in paragraphs (d)(1)(i) through (iii) of this section for each wet electrostatic precipitator field. Your operating limits are established as the lowest average value for each operating parameter corresponding to any of the three test runs.

(e) If you use an air pollution control device other than a wet scrubber, dynamic wet scrubber, dry electrostatic precipitator, wet electrostatic precipitator, or baghouse, and it is subject to performance testing in § 63.9620, you must submit a site-specific monitoring plan in accordance with § 63.9631(f). The site-specific monitoring plan must include the site-specific procedures for demonstrating initial and continuous compliance with the corresponding operating limits.

(f) You may change the operating limits for any air pollution control device as long as you meet the requirements in paragraphs (f)(1) through (3) of this section.

(1) Submit a written notification to the Administrator of your request to conduct a new performance test to revise the operating limit.

(2) Conduct a performance test to demonstrate compliance with the applicable emission limitation in Table 1 to this subpart.

(3) Establish revised operating limits according to the applicable procedures in paragraphs (a) through (e) of this section.

§ 63.9623 How do I demonstrate initial compliance with the emission limitations that apply to me?

(a) For each affected source subject to an emission limit in Table 1 to this subpart, you must demonstrate initial compliance by meeting the emission limit requirements in paragraphs (a)(1) through (4) of this section.

(1) For ore crushing and handling, the flow-weighted mean concentration of particulate matter, determined according to the procedures in §§ 63.9620(a) and 63.9621(b), must not exceed the emission limits in Table 1 to this subpart.

(2) For indurating furnaces, the flow-weighted mean concentration of particulate matter, determined according to the procedures in §§ 63.9620(b) and 63.9621(c), must not exceed the emission limits in Table 1 to this subpart.

(3) For finished pellet handling, the flow-weighted mean concentration of particulate matter, determined according to the procedures in §§ 63.9620(c) and 63.9621(b), must not exceed the emission limits in Table 1 to this subpart.

(4) For ore dryers, the flow-weighted mean concentration of particulate matter, determined according to the procedures in §§ 63.9620(d) and 63.9621(c), must not exceed the emission limits in Table 1 to this subpart.

(b) For each affected source subject to an emission limit in Table 1 to this subpart, you must demonstrate initial compliance by meeting the operating limit requirements in paragraphs (b)(1) through (5) of this section.

(1) For each wet scrubber subject to performance testing in § 63.9620 and operating limits for pressure drop and scrubber water flow rate in § 63.9590(b)(1), you have established appropriate site-specific operating limits and have a record of the pressure drop and scrubber water flow rate measured during the performance test in accordance with § 63.9622(a).

(2) For each dynamic wet scrubber subject to performance testing in § 63.9620 and operating limits for scrubber water flow rate and either fan amperage or pressure drop in § 63.9590(b)(2), you have established appropriate site-specific operating limits and have a record of the scrubber water flow rate and either the fan amperage or pressure drop value, measured during the performance test in accordance with § 63.9622(b).

(3) For each dry electrostatic precipitator subject to performance testing in § 63.9620 and one of the operating limits in § 63.9590(b)(3), you must meet the requirements in paragraph (b)(3)(i) or (ii) of this section.