COSMOS
Navigate the Compliance Universe

40 C.F.R. § 63.705

Performance test methods and procedures to determine initial compliance.

(a) Except as specified in § 63.705(a) (1) through (3), to determine initial compliance with the emission limits under § 63.703 (c), (d)(2), (e)(1), (f)(1), and (g), the owner or operator shall conduct an initial performance demonstration as required under § 63.7 using the procedures and test methods listed in § 63.7 and § 63.705. If multiple emission points are vented to one common control device to meet the requirements of § 63.703 (c), (d)(2), (e)(1), and (f)(1), only one performance test is required to demonstrate initial compliance for that group of emission points. This section also contains initial compliance demonstration procedures (other than testing) for owners or operators subject to § 63.703 (c), (d)(1), (e)(1)(ii), (f)(1)(ii), and (g).

(1) A control device (not enclosure) used to comply with § 63.703 (c), (e), or (f) does not need to be tested if each of the following criteria are met:

(i) It is used to control gaseous HAP emissions from an existing affected source;

(ii) It is operating prior to March 11, 1994;

(iii) It is equipped with continuous emission monitors for determining inlet and outlet total HAP or VOC concentration, such that a percent efficiency can be calculated; and

(iv) The continuous emission monitors are used to demonstrate continuous compliance in accordance with § 63.704(c)(3)(i).

(2) The owner or operator is not required to conduct an initial performance test if the requirements of § 63.7(e)(2)(iv) or § 63.7(h) are met.

(3) An owner or operator is not required to conduct an initial performance test for a capture device when:

(i) The room, enclosure, or vent was previously tested to demonstrate compliance with subpart SSS of part 60; and

(ii) Sufficient data were gathered during the test to establish operating parameter values in accordance with § 63.704(b)(6) (i), (ii), and (iii).

(b) When an initial compliance demonstration is required by this subpart, the procedures in paragraphs (b)(1) through (b)(10) of this section shall be used in determining initial compliance with the provisions of this subpart.

(1) EPA Method 24 of appendix A of part 60 is used to determine the VOC content in coatings. If it is demonstrated to the satisfaction of the Administrator that plant coating formulation data are equivalent to EPA Method 24 results, formulation data may be used. In the event of any inconsistency between an EPA Method 24 test and an affected source's formulation data, the EPA Method 24 test will govern. For EPA Method 24, the

coating sample must be a 1-liter sample taken into a 1-liter container at a location and time such that the sample will be representative of the coating applied to the base substrate (i.e., the sample shall include any dilution solvent or other VOC added during the manufacturing process). The container must be tightly sealed immediately after the sample is taken. Any solvent or other VOC added after the sample is taken must be measured and accounted for in the calculations that use EPA Method 24 results.

(2) Formulation data is used to determine the HAP content of coatings.

(3) Either EPA Method 18 or EPA Method 25A of appendix A of part 60, as appropriate to the conditions at the site, shall be used to determine HAP or VOC concentration of air exhaust streams as required by § 63.705(c). The owner or operator shall submit notice of the intended test method to the Administrator for approval along with the notification of the performance test required under § 63.7(b). Method selection shall be based on consideration of the diversity of organic species present and their total concentration and on consideration of the potential presence of interfering gases. Except as indicated in paragraphs (b)(3) (i) and (ii) of this section, the test shall consist of three separate runs, each lasting a minimum of 30 minutes.

(i) When either EPA Method 18 or EPA Method 25A is to be used in the determination of the efficiency of a fixed-bed carbon adsorption system with a common exhaust stack for all the individual carbon adsorber vessels pursuant to § 63.705(c) (2) or (4), the test shall consist of three separate runs, each coinciding with one or more complete sequences through the adsorption cycles of all of the individual carbon adsorber vessels.

(ii) When either EPA Method 18 or EPA Method 25A is to be used in the determination of the efficiency of a fixed-bed carbon adsorption system with individual exhaust stacks for each carbon adsorber vessel pursuant to § 63.705(c) (3) or (4), each carbon adsorber vessel shall be tested individually. The test for each carbon adsorber vessel shall consist of three separate runs. Each run shall coincide with one or more complete adsorption cycles.

(4) EPA Method 1 or 1A of appendix A of part 60 is used for sample and velocity traverses.

(5) EPA Method 2, 2A, 2C, or 2D of appendix A of part 60 is used for velocity and volumetric flow rates.

(6) EPA Method 3 of appendix A of part 60 is used for gas analysis.

(7) EPA Method 4 of appendix A of part 60 is used for stack gas moisture.

(8) EPA Methods 2, 2A, 2C, 2D, 3, and 4 shall be performed, as applicable, at least twice during each test period.

(9) Wastewater analysis shall be conducted in accordance with paragraph (b)(9)(i) or (b)(9)(ii) of this section.

(i) Use Method 305 of 40 CFR part 63, appendix A and the equations in paragraphs (b)(9)(i) (A) and (B) of this section to determine the total VOHAP concentration of a wastewater stream.

(A) The following equation shall be used to calculate the VOHAP concentration of an individually speciated HAP.

$$C_i = \left(C_c * \frac{MW}{24.055} * \frac{P_i}{760} * \frac{293}{T_i} * t * L * 10^3 \right) / M_s$$

where:

C_i = VOHAP concentration of the individually-speciated organic HAP in the wastewater, parts per million by weight. C_c = Concentration of the organic HAP (i) in the gas stream, as measured by Method 305 of appendix A of this part, parts per million by volume on a dry basis. M_s = Mass of sample, from Method 305 of appendix A of this

part, milligrams. MW = Molecular weight of the organic HAP (i), grams per gram-mole. 24.055 = Ideal gas molar volume at 293° Kelvin and 760 millimeters of mercury, liters per gram-mole. P_i = Barometric pressure at the time of sample analysis, millimeters mercury absolute. 760 = Reference or standard pressure, millimeters mercury absolute. 293 = Reference or standard temperature, °Kelvin. T_i = Sample gas temperature at the time of sample analysis, °Kelvin. t = Actual purge time, from Method 305 of appendix A of this part, minutes.L = Actual purge rate, from Method 305 of appendix A of this part, liters per minute. 10 = Conversion factor, milligrams per gram.