§ 60.744 Monitoring requirements.

(a) Each owner or operator of an affected facility shall install and calibrate all monitoring devices required under the provisions of this section according to the manufacturer's specifications, prior to the initial performance test in locations such that representative values of the monitored parameters will be obtained. The parameters to be monitored shall be continuously measured and recorded during each performance test.

(b) Each owner or operator of an affected facility that uses less than 95 Mg of VOC per year and each owner or operator of a control device that uses at least 130 Mg of VOC per year, each owner or operator of affected coating mix preparation equipment shall demonstrate that:

(1) Covers meeting the following specifications have been installed and are being used properly:
   (i) Cover shall be closed at all times except when adding ingredients, withdrawing samples, transferring the contents, or making visual inspection when such activities cannot be carried out with cover in place. Such activities shall be carried out through ports of the minimum practical size;
   (ii) Cover shall extend at least 2 centimeters beyond the outer rim of the opening or shall be attached to the rim;
   (iii) Cover shall be of such design and construction that contact is maintained between cover and rim along the entire perimeter;
   (iv) Any breach in the cover (such as a slit for insertion of a mixer shaft or port for addition of ingredients) shall be covered consistent with paragraphs (c)(1)(i), (ii), and (iii) of this section when not actively in use. An opening sufficient to allow safe clearance for a mixer shaft is acceptable during those periods when the shaft is in place; and
   (v) A polyethylene or nonpermanent cover may be used provided it meets the requirements of paragraphs (c)(1)(ii), (iii), and (iv) of this section. Such a cover shall not be reused after once being removed.

(2) Procedures detailing the proper use of covers, as specified in paragraph (c)(1)(i) of this section, have been posted in all areas where affected coating mix preparation equipment is used.

(3) Owners or operators meeting the standard specified in §60.742(c)(2)(ii) or (c)(3)(ii) shall also demonstrate that the coating mix preparation equipment is vented to a control device.

(e) If a control device other than a carbon adsorber, condenser, or incinerator is used to control emissions from an affected facility, the necessary operating specifications for that device must be approved by the Administrator. An example of such a device is a flare.

§ 60.745 Hysys determined from Equations (3) and (4), as applicable, is equal to or greater than 0.95.

(c) To demonstrate compliance with §60.742(c)(1) (standard for coating mix preparation equipment servicing a coating operation with concurrent construction of a control device that uses at least 130 Mg per year of VOC), each owner or operator of affected coating mix preparation equipment shall demonstrate that:

(1) Covers meeting the following specifications have been installed and are being used properly:
   (i) Cover shall be closed at all times except when adding ingredients, withdrawing samples, transferring the contents, or making visual inspection when such activities cannot be carried out with cover in place. Such activities shall be carried out through ports of the minimum practical size;
   (ii) Cover shall extend at least 2 centimeters beyond the outer rim of the opening or shall be attached to the rim;
   (iii) Cover shall be of such design and construction that contact is maintained between cover and rim along the entire perimeter;
   (iv) Any breach in the cover (such as a slit for insertion of a mixer shaft or port for addition of ingredients) shall be covered consistent with paragraphs (c)(1)(i), (ii), and (iii) of this section when not actively in use. An opening sufficient to allow safe clearance for a mixer shaft is acceptable during those periods when the shaft is in place; and
   (v) A polyethylene or nonpermanent cover may be used provided it meets the requirements of paragraphs (c)(1)(ii), (iii), and (iv) of this section. Such a cover shall not be reused after once being removed.

(2) Procedures detailing the proper use of covers, as specified in paragraph (c)(1)(i) of this section, have been posted in all areas where affected coating mix preparation equipment is used.

(3) The coating mix preparation equipment is vented to a control device while preparation of the coating is taking place within the vessel; and

(4) The control device efficiency (E or Hsys, as applicable) determined using Equation (1) or Equations (3) and (4), respectively, and the test methods and procedures specified in §60.745(b) through (g) is equal to or greater than 0.95.

(d) To demonstrate compliance with §60.742(c)(2) (standard for coating mix preparation equipment servicing a coating operation that does not have concurrent construction of a control device but uses at least 130 Mg of VOC per year) or §60.742(c)(3) (standard for coating mix preparation equipment servicing a coating operation that uses at least 95 Mg but less than 130 Mg of VOC per year), each owner or operator of affected coating mix preparation equipment shall demonstrate upon inspection that:

(1) Covers satisfying the specifications in paragraphs (c)(1)(i) through (v) of this section have been installed and are being properly operated and maintained; and

(2) Procedures detailing the proper use of covers, as specified in paragraph (c)(1)(i) of this section, have been posted in all areas where affected coating mix preparation equipment is used.

(3) Owners or operators meeting the standard specified in §60.742(c)(2)(ii) or (c)(3)(ii) shall also demonstrate that the coating mix preparation equipment is vented to a control device.

(e) If a control device other than a carbon adsorber, condenser, or incinerator is used to control emissions from an affected facility, the necessary operating specifications for that device must be approved by the Administrator. An example of such a device is a flare.
the provisions specified in §60.742(c)(3) shall:

(1) Make semiannual estimates of the projected annual amount of VOC to be used for the manufacture of polymeric coated substrate at the affected coating operation in that year; and

(2) Maintain records of actual VOC use.

(c) Each owner or operator of an affected facility controlled by a carbon adsorption system and demonstrating compliance by the procedures described in §60.743(a)(1), (2), (b), or (c) (which include control device efficiency determinations) or §60.743(a)(4) (short-term liquid material balance) shall carry out the monitoring provisions of paragraph (c)(1) or (2) of this section, as appropriate.

(1) For carbon adsorption systems with a common exhaust stack for all the individual adsorber vessels, install, calibrate, maintain, and operate, according to the manufacturer’s specifications, a monitoring device that continuously indicates and records the concentration level of organic compounds in either the control device outlet gas stream or in both the control device inlet and outlet gas streams. The outlet gas stream shall be monitored if the percent increase in the concentration level of organic compounds is used as the basis for reporting, as described in §60.747(d)(1)(i). In this case, the owner or operator shall compute daily a 3-day rolling average concentration level of organics in the outlet gas stream from each individual adsorber vessel. The inlet and outlet gas streams shall be monitored if the percent control device efficiency is used as the basis for reporting, as described in §60.747(d)(2)(ii). In this case, the owner or operator shall compute daily a 3-day rolling average efficiency for each individual adsorber vessel.

(d) Each owner or operator of an affected facility controlled by a condensation system and demonstrating compliance by the test methods described in §60.743 (a)(1), (2), (b), or (c) (which include control device efficiency determinations) or §60.743(a)(4) (short-term liquid material balance) shall install, calibrate, maintain, and operate, according to the manufacturer’s specifications, a monitoring device that continuously indicates and records the temperature of the condenser exhaust stream.

(e) Each owner or operator of an affected facility controlled by a thermal incinerator and demonstrating compliance by the test methods described in §60.743 (a)(1), (2), (b), or (c) (which include control device efficiency determinations) shall install, calibrate, maintain, and operate, according to the manufacturer’s specifications, a monitoring device that continuously indicates and records the combustion temperature of the incinerator. The monitoring device shall have an accuracy within ±1 percent of the temperature being measured in Celsius degrees.

(f) Each owner or operator of an affected facility controlled by a catalytic incinerator and demonstrating compliance by the test methods described in §60.743 (a)(1), (2), (b), or (c) (which include control device efficiency determinations) shall install, calibrate, maintain, and operate, according to the manufacturer’s specifications, a monitoring device that continuously indicates and records the gas temperature both upstream and downstream of the catalyt bed. The monitoring device shall have an accuracy within ±1 percent of the temperature being measured in Celsius degrees.
(g) Each owner or operator of an affected facility who demonstrates compliance by the test methods described in §60.743(a)(1) or (2) (which include vapor capture system efficiency determinations) or §60.743(a)(4) (short-term liquid material balance) shall submit a monitoring plan for the vapor capture system to the Administrator for approval with the notification of anticipated startup required under §60.7(a)(2) of the General Provisions. This plan shall identify the parameter to be monitored as an indicator of vapor capture system performance (e.g., the amperage to the exhaust fans or duct flow rates) and the method for monitoring the chosen parameter. The owner or operator shall install, calibrate, maintain, and operate, according to the manufacturer’s specifications, a monitoring device that continuously indicates and records the value of the chosen parameter.

(h) Each owner or operator of an affected facility who demonstrates compliance as described in §60.743(b) shall follow the procedures described in paragraph (g) of this section to establish a monitoring system for the total enclosure.

(i) Each owner or operator of an affected facility shall record time periods of mixing or coating operations when the emission control device is malfunctioning or not in use.

(j) Each owner or operator of an affected facility shall record time periods of mixing or coating operations when each monitoring device is malfunctioning or not in use.

(k) Records of the measurements and calculations required in §60.743 and §60.744 must be retained for at least 2 years following the date of the measurements and calculations.

§ 60.745 Test methods and procedures.

Methods in appendix A of this part, except as provided under §60.8(b), shall be used to determine compliance as follows:

(a) Method 24 is used to determine the VOC content in coatings. If it is demonstrated to the satisfaction of the Administrator that coating formulation data are equivalent to Method 24 results, formulation data may be used. In the event of any inconsistency between a Method 24 test and a facility’s formulation data, the Method 24 test will govern. For Method 24, the coating sample must be a 1-liter sample collected in a 1-liter container at a point in the process where the sample will be representative of the coating applied to the 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 collected. Any solvent or other VOC added after the sample is taken must be measured and accounted for in the calculations that use Method 24 results.

(b) Method 25 shall be used to determine VOC concentrations from incinerator gas streams. Alternative Methods (18 or 25A), may be used as explained in the applicability section of Method 25 in cases where use of Method 25 is demonstrated to be technically infeasible. 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 §60.8(d) of the General Provisions. Except as indicated in paragraphs (b)(1) and (b)(2) of this section, the test shall consist of three separate runs, each lasting a minimum of 30 minutes.

(1) When the method 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 adsorber vessels pursuant to §60.743 (a)(1), (b), or (c), the test shall consist of three separate runs, each coinciding with one or more complete system rotations through the adsorption cycles of all the individual adsorber vessels.

(2) When the method is to be used in the determination of the efficiency of a fixed-bed carbon adsorption system with individual exhaust stacks for each adsorber vessel pursuant to §60.743 (a)(2), (b), or (c), each adsorber vessel shall be tested individually. Each test shall consist of three separate runs, each coinciding with one or more complete adsorption cycles.

(c) Method 1 or 1A is used for sample and velocity traverses;

(d) Method 2, 2A, 2C, or 2D is used for velocity and volumetric flow rates;