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with paragraphs (a) or (b) of this section, the owner or operator shall determine the allowable source-wide HAP emissions for each month using Equation 6 in paragraph (d) of this section, and the actual monthly source-wide HAP emissions in accordance with

paragraph (e)(1) of this section. The owner or operator shall also comply with the provisions of paragraph (e)(2) of this section.

(1) Actual monthly source-wide HAP emissions shall be determined using Equation 7.

$$E_{actual} = E_{unc} - HAPABA_{recovered}$$
 (Equation 7)

Where:

 E_{actual} = Actual source-wide HAP emissions after control, pounds/month.

 $\rm E_{unc}$ = Uncontrolled source-wide HAP emissions, pounds/month, determined in accordance with paragraph (c) (1) through (3) of this section.

HAPABA_{recovered} = HAP ABA recovered, pounds/month, determined in accordance with paragraph (e)(2) of this section.

(2) The amount of HAP ABA recovered shall be determined in accordance with §63.1303(c).

§ 63.1300 Standards for molded flexible polyurethane foam production.

Each owner or operator of a new or existing molded affected source shall comply with the provisions in paragraphs (a) and (b) of this section.

(a) A HAP or HAP-based material shall not be used as an equipment cleaner to flush the mixhead, nor shall it be used elsewhere as an equipment cleaner in a molded flexible polyurethane foam process, with the following exception. Diisocyanates may be used to flush the mixhead and associated piping during periods of startup or maintenance, provided that the diisocyanate compounds are contained in a closed-loop system and are re-used in production.

(b) A HAP-based mold release agent shall not be used in a molded flexible polyurethane foam source process.

$\S 63.1301$ Standards for rebond foam production.

Each owner or operator of a new or existing rebond foam affected source shall comply with the provisions in paragraphs (a) and (b) of this section.

(a) A HAP or HAP-based material shall not be used as an equipment cleaner at a rebond foam source.

(b) A HAP-based mold release agent shall not be used in a rebond foam source.

§63.1302 Applicability of subpart A requirements.

The owner or operator of an affected source shall comply with the applicable requirements of subpart A of this part, as specified in Table 2 of this subpart.

§63.1303 Monitoring requirements.

Owners and operators of affected sources shall comply with each applicable monitoring provision in this section.

(a) Monitoring requirements for storage vessel carbon adsorption systems. Each owner or operator using a carbon adsorption system to meet the requirements of §63.1294(a) or §63.1295 shall monitor the concentration level of the HAP or the organic compounds in the exhaust vent stream (or outlet stream exhaust) from the carbon adsorption system at the frequency specified in (a)(1) or (2) of this section in accordance with either (a)(3) or (4) of this section.

(1) The concentration level of HAP or organic compounds shall be monitored during each unloading event, or once per month during an unloading event if multiple unloading events occur in a month.

(2) As an alternative to monthly monitoring, the owner or operator can set the monitoring frequency at an interval no greater than 20 percent of the carbon replacement interval, which is established using a design analysis described below in paragraphs (a)(1)(i) through (iii) of this section.

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- (i) The design analysis shall consider the vent stream composition, constituent concentration, flow rate, relative humidity, and temperature.
- (ii) The design analysis shall establish the outlet organic concentration level, the capacity of the carbon bed, and the working capacity of activated carbon used for the carbon bed, and
- (iii) The design analysis shall establish the carbon replacement interval based on the total carbon working capacity of the carbon adsorption system and the schedule for filling the storage vessel.
- (3) Measurements of HAP concentration shall be made using 40 CFR part 60, appendix A, Method 18. The measurement shall be conducted over at least one 5-minute interval during which the storage vessel is being filled.
- (4) Measurements of organic compounds shall be made using 40 CFR part 60, Appendix A, Method 25A. The measurement shall be conducted over at least one 5-minute interval during which the storage vessel is being filled.
- (b) Monitoring for HAP ABA and polyol added to the foam production line at the mixhead. (1) The owner or operator of each slabstock affected source shall comply with the provisions in paragraph (b)(1)(i) of this section, and, if applicable, the provisions of paragraph (b)(1)(ii) of this section. Alternatively, the owner or operator may comply with paragraph (b)(5) of this section.
- (i) Owners or operators of all slabstock affected sources shall continuously monitor the amount of polyol added at the mixhead when foam is being poured, in accordance with paragraphs (b)(2) through (4) of this section.
- (ii) Owners or operators of slabstock foam affected sources using the emission point specific limitation option provided in §63.1293(a)(1) shall continuously monitor the amount of HAP ABA added at the mixhead when foam is being poured, in accordance with paragraphs (b)(2)(ii), (b)(3), and (b)(4) of this section.
- (2) The owner or operator shall monitor either:
 - (i) Pump revolutions; or
 - (ii) Flow rate.
- (3) The device used to monitor the parameter from paragraph (b)(2) shall

- have an accuracy to within ±2.0 percent of the HAP ABA being measured, and shall be calibrated initially, and periodically, in accordance with paragraph (b)(3)(i) or (ii) of this section.
- (i) For polyol pumps, the device shall be calibrated at least once each 6 months.
- (ii) For HAP ABA pumps, the device shall be calibrated at least once each month.
- (4) Measurements must be recorded at the beginning and end of the production of each grade of foam within a run of foam.
- (5) As an alternative to the monitoring described in paragraphs (b)(2) through (4) of this section, the owner or operator may develop an alternative monitoring program. Alternative monitoring programs must be submitted to the Administrator for approval in the Precompliance Report as specified in §63.1306(c)(4) for existing sources or in the Application for approval of construction or reconstruction for new sources. If an owner or operator wishes to develop an alternative monitoring program after the compliance date, the program shall be submitted to the Administrator for approval before the owner or operator wishes to begin using the alternative program. If the Administrator does not notify the owner or operator of objections to the program, or any part of the program, within 45 days after its receipt, the program shall be deemed approved. Until the program is approved, the owner or operator of an affected source remains subject to the requirements of this subpart. The components of an alternative monitoring program shall include, at a minimum, the items listed in paragraphs (b)(5)(i) through (iv) of this section.
- (i) A description of the parameter to be continuously monitored when foam is being poured to measure the amount of HAP ABA or polyol added at the mixhead.
- (ii) A description of how the monitoring results will be recorded, and how the results will be converted into amount of HAP ABA or polyol delivered to the mixhead.
- (iii) Data demonstrating that the monitoring device is accurate to within ± 2.0 percent.

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- (iv) Procedures to ensure that the accuracy of the parameter monitoring results is maintained. These procedures shall, at a minimum, consist of periodic calibration of all monitoring devices.
- (c) Recovered HAP ABA monitoring. The owner or operator of each slabstock affected source using a recovery device to reduce HAP ABA emissions shall develop and comply with a recovered HAP ABA monitoring and recordkeeping program. The components of these plans shall include, at a minimum, the items listed in paragraphs (c)(1) through (5) of this section. These plans must be submitted for approval in accordance with paragraph (c)(6) of this section.
- (1) A device, installed, calibrated, maintained, and operated according to the manufacturer's specifications, that indicates the cumulative amount of HAP ABA recovered by the solvent recovery device over each 1-month period. The device shall be certified by the manufacturer to be accurate to within ±2.0 percent.
- (2) The location where the monitoring will occur shall ensure that the measurements are taken after HAP ABA has been fully recovered (i.e., after separation from water introduced into the HAP ABA during regeneration).
- (3) A description of the parameter to be monitored, and the times the parameter will be monitored.
- (4) Data demonstrating that the monitoring device is accurate to within ±2.0 percent.
- (5) Procedures to ensure that the accuracy of the parameter monitoring results is maintained. These procedures shall, at a minimum, consist of periodic calibration of all monitoring devices.
- (6) Recovered HAP ABA monitoring and recordkeeping programs must be submitted to the Administrator for approval in the Precompliance Report as specified in §63.1306(c)(6) for existing sources or in the Application for approval of construction or reconstruction for new sources. If an owner or operator wishes to develop a recovered HAP ABA monitoring program after the compliance date, the program shall be submitted to the Administrator for

- approval before the owner or operator wishes to begin using the program. If the Administrator does not notify the owner or operator of objections to the program within 45 days after its receipt, the program shall be deemed approved. Until the program is approved, the owner or operator of an affected source remains subject to the requirements of this subpart.
- (d) Monitoring of HAP ABA in a storage vessel. The amount of HAP ABA in a storage vessel shall be determined weekly by monitoring the HAP ABA level in the storage vessel using a level measurement device that meets the criteria described in paragraphs (d)(1) and either (d)(2) or (d)(3) of this section.
- (1) The level measurement device must be calibrated initially and at least once per year thereafter.
- (2) With the exception of visuallyread level measurement devices (i.e., gauge glass), the device must have either a digital or printed output.
- (3) If the level measurement device is a visually-read device, the device must be equipped with permanent graduated markings to indicate HAP ABA level in the storage tank.
- (e) Monitoring of HAP ABA added to a storage vessel. The amount of HAP ABA added to a storage vessel during a delivery shall be determined in accordance with either paragraphs (e)(1), (2), (3), or (4) of this section.
- (1) The volume of HAP ABA added to the storage vessel shall be determined by recording the volume in the storage vessel prior to the delivery and the volume after the delivery, provided that the storage tank level measurement device used to determine the levels meets the criteria in (d) of this section.
- (2) The volume of HAP ABA added to the storage vessel shall be determined by monitoring the flow rate using a device with an accuracy of ± 2.0 percent, and calibrated initially and at least once each six months thereafter.
- (3) The weight of HAP ABA added to the storage vessel shall be calculated as the difference of the full weight of the transfer vehicle prior to unloading into the storage vessel and the empty weight of the transfer vehicle after unloading into the storage vessel. The weight shall be determined using a

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scale meeting the requirements of either paragraph (e)(2)(i) or (ii) of this section.

- (i) A scale approved by the State or local agencies using the procedures contained in Handbook 44, Specifications, Tolerances, and Other Technical Requirements for Weighing and Measuring Devices 1998 (incorporation by reference—see §63.14).
- (ii) A scale determined to be in compliance with the requirements of the National Institute of Standards and Technology Handbook 44 at least once per year by a registered scale technician.
- (4) As an alternative to the monitoring options described in paragraphs (e)(1) through (e)(3) of this section, the owner or operator may develop an alternative monitoring program. Alternative monitoring programs must be submitted to the Administrator for approval in the Precompliance Report as specified in §63.1306(c)(4) for existing sources or in the Application for approval of construction or reconstruction for new sources. If an owner or operator wishes to develop an alternative monitoring program after the compliance date, the program shall be submitted to the Administrator for approval before the owner or operator wishes to begin using the alternative program. If the Administrator does not notify the owner or operator of objections to the program within 45 days after its receipt, the program shall be deemed approved. Until the program is approved, the owner or operator of an affected source remains subject to the requirements of this subpart. The components of an alternative monitoring program shall include, at a minimum, the items listed in paragraphs (e)(3)(i) through (iv) of this section.
- (i) A description of the parameter to be monitored to determine the amount of HAP ABA added to the storage vessel during a delivery,
- (ii) A description of how the results will be recorded, and how the results will be converted into the amount of HAP ABA added to the storage vessel during a delivery,
- (iii) Data demonstrating that the monitoring device is accurate to within ± 2.0 percent, and

(iv) Procedures to ensure that the accuracy of the monitoring measurements is maintained. These procedures shall, at a minimum, consist of periodic calibration of all monitoring devices.

§63.1304 Testing requirements.

Owners and operators of affected sources shall use the test methods listed in this section, as applicable, to demonstrate compliance with this subpart.

- (a) Test method and procedures to determine equipment leaks. Monitoring, as required under §63.1296, shall comply with the following requirements:
- (1) Monitoring shall comply with Method 21 of 40 CFR part 60, appendix A.
- (2) The detection instrument shall meet the performance criteria of Method 21 of 40 CFR part 60, appendix A, except that the instrument response factor criteria in section 3.1.2(a) of Method 21 shall be for the average composition of the source fluid, rather than for each individual VOC in the stream. For source streams that contain nitrogen, air, or other inerts which are not HAP or VOC, the average stream response factor shall be calculated on an inertfree basis. The response factor may be determined at any concentration for which monitoring for leaks will be conducted.
- (3) The instrument shall be calibrated before use on each day of its use by the procedures specified in Method 21 of 40 CFR part 60, appendix A.
 - (4) Calibration gases shall be:
- (i) Zero air (less than 10 ppm of hydrocarbon in air); and
- (ii) A mixture of methane and air at a concentration of approximately, 1,000 ppm for all transfer pumps; and 500 ppm for all other equipment, except as provided in paragraph (a)(4)(iii) of this section.
- (iii) The instrument may be calibrated at a higher methane concentration (up to 2,000 ppm) than the leak definition concentration for a specific piece of equipment for monitoring that piece of equipment. If the monitoring instrument's design allows for multiple calibration gas concentrations, then the lower concentration calibration gas