

Environmental Protection Agency

§ 63.1301

source-wide HAP emissions for each individual month shall be calculated using Equation 6.

$$\text{emiss}_{\text{allow, month}} = \sum_{j=1}^m \left(\sum_{i=1}^n \frac{(\text{limit}_i) (\text{polyol}_i)}{100} \right) j \quad (\text{Equation 6})$$

Where:

$\text{emiss}_{\text{allow, month}}$ = Allowable HAP ABA storage and equipment leak emissions, HAP ABA emissions from the production line, and equipment cleaning HAP emissions from the slabstock foam production source for the month, pounds.

m = Number of slabstock foam production lines.

polyol_i = Amount of polyol used in the month in the production of foam grade i on foam production line j , determined in accordance with § 63.1303(b), pounds.

n = Number of foam grades produced in the month on foam production line j .

limit_i = HAP ABA formulation limit for foam grade i , parts HAP ABA

per 100 parts polyol. The HAP ABA formulation limits are determined in accordance with § 63.1297(d).

(e) *Compliance using recovery devices.* If a recovery device is used to comply 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.

$$E_{\text{actual}} = E_{\text{unc}} - \text{HAPABA}_{\text{recovered}} \quad (\text{Equation 7})$$

Where:

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

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

$\text{HAPABA}_{\text{recovered}}$ = 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.

§ 63.1301 Standards for rebond foam production.

Each owner or operator of a new or existing rebond foam affected source

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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.

(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

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(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.