Subpart III—National Emission Standards for Hazardous Air Pollutants for Flexible Polyurethane Foam Production

SOURCE: 63 FR 53996, Oct. 7, 1998, unless otherwise noted.

§63.1290 Applicability.

- (a) The provisions of this subpart apply to each new and existing flexible polyurethane foam or rebond foam process that meets the criteria listed in paragraphs (a)(1) through (3) of this section.
- (1) Produces flexible polyurethane or rebond foam;
- (2) Emits a HAP, except as provided in paragraph (c)(2) of this section; and
- (3) Is located at a plant site that is a major source, as defined in §63.2 of subpart A.
- (b) For the purpose of this subpart, an affected source includes all processes meeting the criteria in paragraphs (a)(1) through (a)(3) of this section that are located at a contiguous plant site, with the exception of those processes listed in paragraph (c) of this section.

- (c) A process meeting one of the following criteria listed in paragraphs (c)(1) through (3) of this section shall not be subject to the provisions of this subpart:
- (1) A process exclusively dedicated to the fabrication of flexible polyurethane foam;
- (2) A research and development process; or
- (3) A slabstock flexible polyurethane foam process at a plant site where the total amount of HAP, excluding diisocvanate reactants, used for slabstock foam production and foam fabrication is less than or equal to five tons per year, provided that slabstock foam production and foam fabrication processes are the only processes at the plant site that emit HAP. The amount of non-diisocyanate HAP used, HAP_{used} shall be calculated using Equation 1. Owners or operators of slabstock foam processes exempt from the regulation in accordance with this paragraph shall maintain records to verify that total non-diisocyanate HAP use at the plant site is less than 5 tons per year (4.5 megagrams per year).

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Where,

HAP_{used} = amount of HAP, excluding diisocyanate reactants, used at the plant site for slabstock foam production and foam fabrication, tons per year

VOL_{ABA,i} = volume of HAP ABA i used at the facility, gallons per year

 $D_{ABA,i}$ = density of HAP ABA i, pounds per gallon

m = number of HAP ABAs used

 $VOL_{clean,j}$ = volume of HAP used as an equipment cleaner, gallons per year $D_{clean,j}$ = density of HAP equipment cleaner j, pounds per gallon

WT_{HAPclean,k} = HAP content of equipment cleaner j, weight percent

n = number of HAP equipment cleaners

 $VOL_{adh,k}$ = volume of adhesive k, gallons per year

 $D_{adh,k}$ = density of adhesive k, pounds per gallon

 $WT_{HAPadh,k} = HAP$ content of adhesive k, weight percent

o = number of adhesives used

§63.1291 Compliance schedule.

- (a) Existing affected sources shall be in compliance with all provisions of this subpart no later than October 8, 2001.
- (b) New or reconstructed affected sources shall be in compliance with all provisions of this subpart upon initial startup.

§63.1292 Definitions.

All terms used in this subpart shall have the meaning given them in the Act, in subpart A of this part, and in this section. If a term is defined in subpart A and in this section, it shall have the meaning given in this section for purposes of this subpart.

Auxiliary blowing agent, or ABA, means a low-boiling point liquid added to assist foaming by generating gas beyond that resulting from the isocyanate-water reaction.

Breakthrough means that point in the adsorption step when the mass transfer zone (i.e., the section of the carbon bed where the HAP is removed from the carrier gas stream) first reaches the carbon bed outlet as the mass transfer zone moves down the bed in the direction of flow. The breakthrough point is characterized by the beginning of a sharp increase in the outlet HAP or organic compound concentration.

Calibrate means to verify the accuracy of a measurement device against a known standard. For the purpose of this subpart, there are two levels of calibration. The initial calibration includes the verification of the accuracy of the device over the entire operating range of the device. Subsequent calibrations can be conducted for a point or several points in a limited range of operation that represents the most common operation of the device.

Canned motor pump means a pump with interconnected cavity housings, motor rotors, and pump casing. In a canned motor pump, the motor bearings run in the process liquid and all seals are eliminated.

Carbon adsorption system means a system consisting of a tank or container that contains a specific quantity of activated carbon. For the purposes of this subaprt, a carbon adsorption system is used as a control device for storage vessels. Typically, the spent carbon bed does not undergo regeneration, but is replaced.

Connector means flanged, screwed, or other joined fittings used to connect two pipe lines or a pipe line and a piece of equipment. A common connector is a flange. Joined fittings welded completely around the circumference of the interface are not considered to be

connectors for the purposes of this subpart.

Cured foam means flexible polyurethane foam with fully developed physical properties. A period of 12 to 24 hours from pour is typically required to completely cure foam, although mechanical or other devices are sometimes used to accelerate the curing process.

Curing area means the area in a slabstock foam production facility where foam buns are allowed to fully develop physical properties.

Diaphragm pump means a pump where the driving member is a flexible diaphragm made of metal, rubber, or plastic. In a diaphragm pump, there is no packing or seals that are exposed to the process liquid.

Diisocyanate means a compound containing two isocyanate groups per molecule. The most common diisocyanate compounds used in the flexible polyurethane foam industry are toluene diisocyanate (TDI) and methylene diphenyl diisocyanate (MDI).

Flexible polyurethane foam means a flexible cellular polymer containing urea and carbamate linkages in the chain backbone produced by reacting a disocyanate, polyol, and water. Flexible polyurethane foams are opencelled, permit the passage of air through the foam, and possess the strength and flexibility to allow repeated distortion or compression under stress with essentially complete recovery upon removal of the stress.

Flexible polyurethane foam process means the equipment used to produce a flexible polyurethane foam product. For the purpose of this subpart, the flexible polyurethane foam process includes raw material storage; production equipment and associated piping, ductwork, etc.; and curing and storage areas.

Foam fabrication process means an operation for cutting or bonding flexible polyurethane foam pieces together or to other substrates.

Grade of foam means foam with a distinct combination of indentation force deflection (IFD) and density values.

HAP ABA means methylene chloride, or any other HAP compound used as an auxiliary blowing agent.

HAP-based means to contain 5 percent (by weight) or more of HAP. This applies to equipment cleaners (and mixhead flushes) and mold release agents. The concentration of HAP may be determined using EPA test method 18, material safety data sheets, or engineering calculations.

High-pressure mixhead means a mixhead where mixing is achieved by impingement of the high pressure streams within the mixhead.

Indentation Force Deflection (IFD) means a measure of the load bearing capacity of flexible polyurethane foam. IFD is generally measured as the force (in pounds) required to compress a 50 square inch circular indentor foot into a four inch thick sample, typically 15 inches square or larger, to 25 percent of the sample's initial height.

In diisocyanate service means a piece of equipment that contains or contacts a diisocyanate.

In HAP ABA service means a piece of equipment that contains or contacts a HAP ABA.

Initial startup means the first time a new or reconstructed affected source begins production of flexible polyurethane foam.

Isocyanate means a reactive chemical grouping composed of a nitrogen atom bonded to a carbon atom bonded to an oxygen atom; or a chemical compound, usually organic, containing one or more isocyanate groups.

Magnetic drive pump means a pump where an externally-mounted magnet coupled to the pump motor drives the impeller in the pump casing. In a magnetic drive pump, no seals contact the process fluid.

Metering pump means a pump used to deliver reactants, ABA, or additives to the mixhead.

Mixhead means a device that mixes two or more component streams before dispensing foam producing mixture to the desired container.

Molded flexible polyurethane foam means a flexible polyurethane foam that is produced by shooting the foam mixture into a mold of the desired shape and size.

Mold release agent means any material which, when applied to the mold surface, serves to prevent sticking of the foam part to the mold.

Plant site means all contiguous or adjoining property that is under common control, including properties that are separated only by a road or other public right-of-way. Common control includes properties that are owned, leased, or otherwise operated by the same entity, parent entity, subsidiary, or any combination thereof.

Polyol, for the purpose of this subpart, means a polyether or polyester polymer with more than one reactive hydroxyl group attached to the molecule.

Rebond foam means the foam resulting from a process of adhering small particles of foam (usually scrap or recycled foam) together to make a usable cushioning product. Various adhesives and bonding processes are used. A typical application for rebond foam is for carpet underlay.

Rebond foam process means the equipment used to produce a rebond foam product. For the purpose of this subpart, the rebond foam process includes raw material storage; production equipment and associated piping, ductwork, etc.; and curing and storage areas.

Reconstructed source means an affected source undergoing reconstruction, as defined in subpart A. For the purposes of this subpart, process modifications made to reduce HAP ABA emissions to meet the existing source requirements of this subpart shall not be counted in determining whether or not a change or replacement meets the definition of reconstruction.

Recovery device means an individual unit of equipment capable of and used for the purpose of recovering chemicals for use, reuse, or sale. Recovery devices include, but are not limited to, carbon adsorbers, absorbers, and condensers.

Research and development process means a laboratory or pilot plant operation whose primary purpose is to conduct research and development into new processes and products, where the operations are under the close supervision of technically trained personnel, and which is not engaged in the manufacture of products for commercial sale except in a de minimis manner.

Run of foam means a continuous production of foam, which may consist of several grades of foam.

Sealless pump means a canned-motor pump, diaphragm pump, or magnetic drive pump, as defined in this section.

Slabstock flexible polyurethane foam means flexible polyurethane foam that is produced in large continuous buns that are then cut into the desired size and shape.

Slabstock flexible polyurethane foam production line includes all portions of the flexible polyurethane foam process from the mixhead to the point in the process where the foam is completely cured.

Storage vessel means a tank or other vessel that is used to store disocyanate or HAP ABA for use in the production of flexible polyurethane foam. Storage vessels do not include vessels with capacities smaller than 38 cubic meters (or 10,000 gallons).

Transfer pump means all pumps used to transport diisocyanate or HAP ABA that are not metering pumps.

Transfer vehicle means a railcar, tank truck, or other vehicle used to transport HAP ABA to the flexible polyurethane foam facility.

§63.1293 Standards for slabstock flexible polyurethane foam production.

Each owner or operator of a new or existing slabstock affected source shall comply with §63.1294 and either paragraph (a) or (b) of this section:

- (a) The emission point specific limitations in §§ 63.1295 through 63.1298; or
- (b) For sources that use no more than one HAP as an ABA and an equipment cleaner, the source-wide emission limitation in §63.1299.

§ 63.1294 Standards for slabstock flexible polyurethane foam production dissocyanate emissions.

Each new and existing slabstock affected source shall comply with the provisions of this section.

- (a) Diisocyanate storage vessels. Diisocyanate storage vessels shall be equipped with either a system meeting the requirements in paragraph (a)(1) of this section, or a carbon adsorption system meeting the requirements of paragraph (a)(2) of this section.
- (1) The storage vessel shall be equipped with a vapor return line from the storage vessel to the tank truck or

rail car that is connected during unloading.

- (i) During each unloading event, the vapor return line shall be inspected for leaks by visual, audible, or any other detection method.
- (ii) When a leak is detected, it shall be repaired as soon as practicable, but not later than the subsequent unloading event.
- (2) The storage vessel shall be equipped with a carbon adsorption system, meeting the monitoring requirements of §63.1303(a), that routes displaced vapors through activated carbon before being discharged to the atmosphere. The owner or operator shall replace the existing carbon with fresh carbon upon indication of breakthrough before the next unloading event.
- (b) Transfer pumps in disocyanate service. Each transfer pump in disocyanate service shall meet the requirements of paragraph (b)(1) or (b)(2) of this section.
- (1) The pump shall be a sealless pump; or
- (2) The pump shall be a submerged pump system meeting the requirements in paragraphs (b)(2)(i) through (iii) of this section.
- (i) The pump shall be completely immersed in bis(2-ethylhexyl)phthalate (DEHP, CAS #118-81-7), 2(methyloctyl)phthalate (DINP, CAS #68515-48-0), or another neutral oil.
- (ii) The pump shall be visually monitored weekly to detect leaks,
- (iii) When a leak is detected, it shall be repaired in accordance with the procedures in paragraphs (b)(2)(iii)(A) and (B) of this section, except as provided in paragraph (d) of this section.

(A) The leak shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected.

- (B) A first attempt at repair shall be made no later than 5 calendar days after the leak is detected. First attempts at repair include, but are not limited to, the following practices where practicable:
 - (1) Tightening of packing gland nuts.
- (2) Ensuring that the seal flush is operating at design pressure and temperature.
- (c) Other components in dissocyanate service. If evidence of a leak is found by

visual, audible, or any other detection method, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in paragraph (d) of this section. The first attempt at repair shall be made no later than 5 calendar days after each leak is detected.

- (d) *Delay of repair*. (1) Delay of repair of equipment for which leaks have been detected is allowed for equipment that is isolated from the process and that does not remain in diisocyanate service.
- (2) Delay of repair for valves and connectors is also allowed if:
- (i) The owner or operator determines that diisocyanate emissions of purged material resulting from immediate repair are greater than the fugitive emissions likely to result from delay of repair, and
- (ii) The purged material is collected and destroyed or recovered in a control device when repair procedures are effected
- (3) Delay of repair for pumps is also allowed if repair requires replacing the existing seal design with a sealless pump, and repair is completed as soon as practicable, but not later than 6 months after the leak was detected.

§63.1295 Standards for slabstock flexible polyurethane foam production— HAP ABA storage vessels.

Each owner or operator of a new or existing slabstock affected source complying with the emission point specific limitation option provided in §63.1293(a) shall control HAP ABA storage vessels in accordance with the provisions of this section.

- (a) Each HAP ABA storage vessel shall be equipped with either a vapor balance system meeting the requirements in paragraph (b) of this section, or a carbon adsorption system meeting the requirements of paragraph (c) of this section.
- (b) The storage vessel shall be equipped with a vapor balance system. The owner or operator shall ensure that the vapor return line from the storage vessel to the tank truck or rail car is connected during unloading.
- (1) During each unloading event, the vapor return line shall be inspected for

leaks by visual, audible, olfactory, or any other detection method.

- (2) When a leak is detected, it shall be repaired as soon as practicable, but not later than the subsequent unloading event.
- (c) The storage vessel shall be equipped with a carbon adsorption system, meeting the monitoring requirements of §63.1303(a), that routes displaced vapors through activated carbon before discharging to the atmosphere. The owner or operator shall replace the existing carbon with fresh carbon upon indication of breakthrough before the next unloading event.

§63.1296 Standards for slabstock flexible polyurethane foam production— HAP ABA equipment leaks.

Each owner or operator of a new or existing slabstock affected source complying with the emission point specific limitation option provided in §63.1293(a) shall control HAP ABA emissions from leaks from transfer pumps, valves, connectors, pressure-relief valves, and open-ended lines in accordance with the provisions in this section.

- (a) *Pumps*. Each pump in HAP ABA service shall be controlled in accordance with either paragraph (a)(1) or (a)(2) of this section.
- (1) The pump shall be a sealless pump, or
- (2) Each pump shall be monitored for leaks in accordance with paragraphs (a)(2)(i) and (ii) of this section. Leaks shall be repaired in accordance with paragraph (a)(2)(iii) of this section.
- (i) Each pump shall be monitored quarterly to detect leaks by the method specified in §63.1304(a). If an instrument reading of 10,000 parts per million (ppm) or greater is measured, a leak is detected.
- (ii) Each pump shall be checked by visual inspection each calendar week for indications of liquids dripping from the pump seal. If there are indications of liquids dripping from the pump seal, a leak is detected.
- (iii) When a leak is detected, it shall be repaired in accordance with the procedures in paragraphs (a)(2)(iii)(A) and (B) of this section, except as provided in paragraph (f) of this section.

- (A) The leak shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected.
- (B) A first attempt at repair shall be made no later than 5 calendar days after the leak is detected. First attempts at repair include, but are not limited to, the following practices, where practicable:
 - (1) Tightening of packing gland nuts.
- (2) Ensuring that the seal flush is operating at design pressure and temperature.
- (b) Valves. Each valve in HAP ABA service shall be monitored for leaks in accordance with paragraph (b)(1) of this section, except as provided in paragraphs (b)(3) and (4) of this section. Leaks shall be repaired in accordance with paragraph (b)(2) of this section.
- (1) Each valve shall be monitored quarterly to detect leaks by the method specified in §63.1304(a). If an instrument reading of 10,000 parts per million or greater is measured, a leak is detected.
- (2) When a leak is detected, the owner or operator shall repair the leak in accordance with the procedures in paragraphs (b)(2)(i) and (ii) of this section, except as provided in paragraph (f) of this section.
- (i) The leak shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected.
- (ii) A first attempt at repair shall be made no later than 5 calendar days after the leak is detected. First attempts at repair include, but are not limited to, the following practices where practicable:
 - (A) Tightening of bonnet bolts;
 - (B) Replacement of bonnet bolts;
- $\left(C\right)$ Tightening of packing gland nuts; and
- (D) Injection of lubricant into lubricated packing.
- (3) Any valve that is designated as an unsafe-to-monitor valve is exempt from the requirements of paragraphs (b)(1) and (2) of this section if:
- (i) The owner or operator of the valve determines that the valve is unsafe to monitor because monitoring personnel would be exposed to an immediate danger as a consequence of complying with paragraphs (b)(1) and (2) of this section; and

- (ii) The owner or operator of the valve has a written plan that requires monitoring of the valve as frequently as practicable during safe-to-monitor times. The plan shall also include requirements for repairing leaks as soon as possible after detection.
- (iii) The owner or operator shall monitor the unsafe-to-monitor valve in accordance with the written plan, and
- (iv) The owner or operator shall repair leaks in accordance with the written plan.
- (4) Any valve that is designated as a difficult-to-monitor valve is exempt from the requirements of paragraphs (b)(1) and (2) of this section if:
- (i) The owner or operator of the valve determines that the valve cannot be monitored without elevating the monitoring personnel more than 2 meters above a support surface or it is not accessible at any time in a safe manner;
- (ii) The process within which the valve is located is an existing source, or the process within which the valve is located is a new source that has less than 3 percent of the total number of valves designated as difficult to monitor; and
- (iii) The owner or operator of the valve develops a written plan that requires monitoring of the valve at least once per calendar year. The plan shall also include requirements for repairing leaks as soon as possible after detection.
- (iv) The owner or operator shall monitor the difficult-to-monitor valve in accordance with the written plan, and
- (v) The owner or operator shall repair leaks in accordance with the written plan.
- (c) Connectors. Each connector in HAP ABA service shall be monitored for leaks in accordance with paragraph (c)(1) of this section, except as provided in paragraph (c)(3) of this section. Leaks shall be repaired in accordance with (c)(2) of this section, except as provided in paragraph (c)(4) of this section.
- (1) Connectors shall be monitored at the times specified in paragraphs (c)(1)(i) through (iii) of this section to detect leaks by the method specified in §63.1304(a). If an instrument reading of 10,000 ppm or greater is measured, a leak is detected.

- (i) Each connector shall be monitored annually, and
- (ii) Each connector that has been opened or has otherwise had the seal broken shall be monitored for leaks within the first 3 months after being returned to HAP ABA service.
- (iii) If a leak is detected, the connector shall be monitored for leaks in accordance with paragraph (c)(1) of this section within the first 3 months after its repair.
- (2) When a leak is detected, it shall be repaired in accordance with the procedures in paragraphs (c)(2)(i) and (ii) of this section, except as provided in paragraph (c)(4) and paragraph (f) of this section.
- (i) The leak shall be repaired as soon as practicable, but no later than 15 calendar days after the leak is detected.
- (ii) A first attempt at repair shall be made no later than 5 calendar days after the leak is detected.
- (3) Any connector that is designated as an unsafe-to-monitor connector is exempt from the requirements of paragraph (c)(1) of this section if:
- (i) The owner or operator determines that the connector is unsafe to monitor because personnel would be exposed to an immediate danger as a result of complying with paragraph (c)(1) of this section; and
- (ii) The owner or operator has a written plan that requires monitoring of the connector as frequently as practicable during safe-to-monitor periods.
- (4) Any connector that is designated as an unsafe-to-repair connector is exempt from the requirements of paragraph (c)(2) of this section if:
- (i) The owner or operator determines that repair personnel would be exposed to an immediate danger as a consequence of complying with paragraph (c)(2) of this section; and
- (ii) The connector will be repaired as soon as practicable, but not later than 6 months after the leak was detected.
- (d) Pressure-relief devices. Each pressure-relief device in HAP ABA service shall be monitored for leaks in accordance with paragraph (d)(1) of this section. Leaks shall be repaired in accordance with paragraph (d)(2) of this section.
- (1) Each pressure-relief device in HAP ABA service shall be monitored

- within 5 calendar days by the method specified in §63.1304(a) if evidence of a potential leak is found by visual, audible, olfactory, or any other detection method. If an instrument reading of 10,000 ppm or greater is measured, a leak is detected.
- (2) When a leak is detected, the leak shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in paragraph (f) of this section. The owner or operator shall make a first attempt at repair no later than 5 calendar days after the leak is detected.
- (e) Open-ended valves or lines. (1)(i) Each open-ended valve or line in HAP ABA service shall be equipped with a cap, blind flange, plug, or a second valve, except as provided in paragraph (e)(4) of this section.
- (ii) The cap, blind flange, plug, or second valve shall seal the open end at all times except during operations requiring process fluid flow through the open-ended valve or line, or during maintenance or repair.
- (2) Each open-ended valve or line equipped with a second valve shall be operated in a manner such that the valve on the process fluid end is closed before the second valve is closed.
- (3) When a double block and bleed system is being used, the bleed valve or line may remain open during operations that require venting the line between the block valves but shall comply with paragraph (e)(1) of this section at all other times.
- (4) Open-ended valves or lines in an emergency shutdown system which are designed to open automatically in the event of a process upset are exempt from the requirements of paragraphs (e)(1), (2), and (3) of this section.
- (f) Delay of repair. (1) Delay of repair of equipment for which leaks have been detected is allowed for equipment that is isolated from the process and that does not remain in HAP ABA service.
- (2) Delay of repair for valves and connectors is also allowed if:
- (i) The owner or operator determines that emissions of purged material resulting from immediate repair are greater than the fugitive emissions likely to result from delay of repair, and

- (ii) The purged material is collected and destroyed or recovered in a control device when repair procedures are effected.
- (3) Delay of repair for pumps is also allowed if repair requires replacing the existing seal design with a sealless pump, and repair is completed as soon as practicable, but not later than 6 months after the leak was detected.

§ 63.1297 Standards for slabstock flexible polyurethane foam production— HAP ABA emissions from the production line.

- (a) Each owner or operator of a new or existing slabstock affected source complying with the emission point specific limitation option provided in §63.1293(a)(1) shall control HAP ABA emissions from the slabstock polyurethane foam production line in accordance with the provisions in this section. Compliance shall be determined on a rolling annual basis as described in paragraph (a)(1) of this section. As an alternative, the owner or operator can determine compliance on a monthly basis, as described in paragraph (a)(2) of this section.
- (1) Rolling annual compliance. In determining compliance on a rolling annual basis, actual HAP ABA emissions shall be compared to allowable HAP ABA emissions for each consecutive 12-month period. The allowable HAP ABA emission level shall be calculated based on the production for the 12-month period, resulting in a potentially different allowable level for each 12-month period. Compliance shall be determined each month for the previous 12-month period. The compliance requirements are provided in paragraph (b) of this section.
- (2) Monthly compliance alternative. As an alternative to determining compliance on a rolling annual basis, an owner or operator can determine compliance by comparing actual HAP ABA emissions to allowable HAP ABA emissions for each month. The allowable HAP ABA emission level shall be cal-

- culated based on the production for the month, resulting in a potentially different allowable level each month. The requirements for this monthly compliance alternative are provided in paragraph (c) of this section.
- (3) Each owner or operator electing to change between the compliance methods described under paragraphs (a)(1) and (a)(2) of this section shall notify the Administrator no later than 180 calendar days prior to the change.
- (b) Rolling annual compliance. At each slabstock foam production source complying with the rolling annual compliance provisions described in paragraph (a)(1) of this section, actual HAP ABA emissions shall not exceed the allowable HAP ABA emission level for a consecutive 12-month period. The actual HAP ABA emission level for a consecutive 12-month period shall be determined using the procedures in paragraph (b)(1) of this section, and the allowable HAP ABA emission level for the corresponding 12-month period shall be calculated in accordance with paragraph (b)(2) of this section.
- (1) The actual HAP ABA emissions for a 12-month period shall be calculated as the sum of actual monthly HAP ABA emissions for each of the individual 12 months in the period. Actual monthly HAP ABA emissions shall be equal to the amount of HAP ABA added to the slabstock foam production line at the mixhead, determined in accordance with §63.1303(b), unless a recovery device is used. Slabstock foam production sources using recovery devices to reduce HAP ABA emissions shall determine actual monthly HAP ABA emissions using the procedures in paragraph (e) of this section.
- (2) The allowable HAP ABA emissions for a consecutive 12-month period shall be calculated as the sum of allowable monthly HAP ABA emissions for each of the individual 12 months in the period. Allowable HAP ABA emissions for each individual month shall be calculated using Equation 2.

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Where:

- $emiss_{allow,month}$ = Allowable HAP ABA emissions from the slabstock foam production source for the month, pounds.
- m = Number of slabstock foam production lines.
- n = Number of foam grades produced in the month on foam production line
- limit; = 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 paragraph (d) of this section
- (3) The amount of polyol used for specific foam grades shall be based on the amount of polyol added to the slabstock foam production line at the mixhead, determined in accordance with the provisions of §63.1303(b).
- (c) Monthly compliance alternative. At each slabstock foam production source complying with the monthly compliance alternative described in paragraph (a)(2) of this section, actual HAP ABA emissions shall not exceed the corresponding allowable HAP ABA emission level for the same month. The actual monthly HAP ABA emission level shall be determined using the procedures in paragraph (c)(1) of this section, and the allowable monthly HAP

ABA emission level shall be calculated in accordance with paragraph (c)(2) of this section.

- (1) The actual monthly HAP ABA emissions shall be equal to the amount of HAP ABA added to the slabstock foam production line at the mixhead, determined in accordance with §63.1303(b), unless a recovery device is used. Slabstock foam production sources using recovery devices to reduce HAP ABA emissions shall determine actual monthly HAP ABA emissions using the procedures in paragraph (e) of this section.
- (2) The allowable HAP ABA emissions for the month shall be determined in accordance with Equation 2 of this section.
- (d) HAP ABA formulation limitations. For each grade, the HAP ABA formulation limitation shall be determined in accordance with paragraphs (d)(1) through (d)(3) of this section. For any grade, the owner or operator may designate zero as the HAP ABA formulation limitation and not determine the HAP ABA formulation limitation in accordance with paragraphs (d)(1) through (d)(3) of this section.
- (1) For existing sources, the HAP ABA formulation limitation for each grade of slabstock foam produced shall be determined using Equation 3 of this section. Zero shall be the formulation limitation for any grade of foam where the result of the formulation limitation equation (Equation 3) is negative (i.e., less than zero).

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Where:

ABA_{limit}= HAP ABA formulation limitation, parts HAP ABA allowed per hundred parts polyol (pph).

IFD = Indentation force deflection,
 pounds.

DEN = Density, pounds per cubic foot. (2) For new sources, the HAP ABA formulation limitation for each grade of slabstock foam produced shall be determined as described in paragraphs (d)(2)(i) through (d)(2)(iv) of this section and in Table 1 of this subpart.

(i) For each foam grade with a density of 0.95 pounds per cubic foot or less, the HAP ABA formulation limitation shall be determined using Equation 3. Zero shall be the formulation limitation for any grade of foam where the result of the formulation limitation equation (Equation 3 of this section) is negative (i.e., less than zero).

- (ii) For each foam grade with a density of 1.4 pounds per cubic foot or less, and an IFD of 15 pounds or less, the HAP ABA formulation limitation shall be determined using Equation 3.
- (iii) For each foam grade with a density greater than 0.95 pounds per cubic foot and an IFD greater than 15 pounds, the HAP ABA formulation limitation shall be zero.
- (iv) For each foam grade with a density greater than 1.40 pounds per cubic foot, the HAP ABA formulation limitation shall be zero.
- (3) With the exception of those grades for which the owner or operator has designated zero as the HAP ABA formulation limitation, the IFD and density for each foam grade shall be determined in accordance with §63.1304(b)

and recorded in accordance with $\S63.1307(c)(1)(i)(B)$ or $\S63.1307(c)(2)(i)(B)$ within 10 working days of the production of the foam.

- (e) Compliance using recovery devices. If a recovery device is used to comply with paragraphs (b) or (c) of this section, the owner or operator shall determine the allowable HAP ABA emissions for each month using Equation 2 in paragraph (b)(2) of this section, and the actual monthly HAP ABA 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) The actual monthly HAP ABA emissions shall be determined using Equation 4:

ER07OC98.006

Where:

$$\begin{split} E_{actual} &= Actual \ HAP \ ABA \ emissions \\ & after \ control, \ pounds/month. \end{split}$$

$$\begin{split} E_{unc} &= \text{Uncontrolled HAP ABA emissions, pounds/month, determined in accordance with paragraph (b)(1) of this section.} \end{split}$$

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).

§63.1298 Standards for slabstock flexible polyurethane foam production— HAP emissions from equipment cleaning.

Each owner or operator of a new or existing slabstock affected source complying with the emission point specific limitation option provided in §63.1293(a)(1) shall not use a HAP or a HAP-based material as an equipment cleaner.

§63.1299 Standards for slabstock flexible polyurethane foam production—source-wide emission limitation.

Each owner or operator of a new or existing slabstock affected source complying with the source-wide emission limitation option provided in \$63.1293(b) shall control HAP ABA storage and equipment leak emissions, HAP ABA emissions from the production line, and equipment cleaning HAP emissions in accordance with the provisions in this section. Compliance shall be determined on a rolling annual basis in accordance with paragraph (a) of this section. As an alternative, the owner or operator can determine compliance monthly, as described in paragraph (b) of this section.

(a) Rolling annual compliance. Under the rolling annual compliance provisions, actual source-wide HAP ABA storage and equipment leak emissions, HAP ABA emissions from the production line, and equipment cleaning HAP emissions are compared to allowable source-wide emissions for each consecutive 12-month period. The allowable source-wide HAP emission level is calculated based on the production for the 12-month period, resulting in a potentially different allowable level for each 12-month period. While compliance is on an annual basis, compliance shall be determined monthly for the preceding 12-month period. The actual source-wide HAP emission level for a consecutive 12-month period shall be determined using the procedures in paragraphs (c)(1) through (4) of this section, unless a recovery device is used. Slabstock foam production sources using recovery devices shall determine actual source-wide HAP emissions in accordance with paragraph (e) of this section. The allowable HAP emission level for a consecutive 12-month period shall be determined using the procedures in paragraph (d) of this section.

(b) Monthly compliance alternative. As an alternative to determining compliance on a rolling annual basis, an owner or operator can determine compliance by comparing actual HAP emissions to allowable HAP emissions for each month. The allowable sourcewide emission level is calculated based on the production for the month, resulting in a potentially different allowable level each month. The actual monthly emission level shall be determined using the procedures in paragraphs (c)(1) through (3) of this section,

unless a recovery device is used. Slabstock foam production sources using recovery devices shall determine actual source-wide HAP emissions in accordance with paragraph (e) of this section. The allowable monthly HAP ABA emission level shall be determined in accordance with Equation 6.

- (c) Procedures for determining actual source-wide HAP emissions. The actual source-wide HAP ABA storage and equipment leak emissions, HAP ABA emissions from the production line, and equipment cleaning HAP emissions shall be determined using the procedures in this section. Actual source-wide HAP emissions for each individual month shall be determined using the procedures specified in paragraphs (c)(1) through (3) of this section.
- (1) Actual source-wide HAP emissions for a month shall be determined using Equation 5 and the information determined in accordance with paragraphs (c)(2) and (3) of this section.

ER07OC98.007

Where.

- PWE_{actual} = Actual source-wide HAP ABA and equipment cleaning HAP emissions for a month, pounds/ month
- n = Number of HAP ABA storage ves-
- $ST_{i,\ begin}$ = Amount of HAP ABA in storage vessel i at the beginning of the month, pounds, determined in accordance with the procedures listed in paragraph (c)(2) of this section.
- $ST_{i,\ end} =$ Amount of HAP ABA in storage vessel i at the end of the month, pounds, determined in accordance with the procedures listed in paragraph (c)(2) of this section.
- ADD_i = Amount of HAP ABA added to storage vessel i during the month, pounds, determined in accordance with the procedures listed in paragraph (c)(3) of this section.
- (2) The amount of HAP ABA in a storage vessel shall be determined by monitoring the HAP ABA level in the

storage vessel in accordance with $\S 63.1303(d)$.

- (3) The amount of HAP ABA added to a storage vessel for a given month shall be the sum of the amounts of all individual HAP ABA deliveries that occur during the month. The amount of each individual HAP ABA delivery shall be determined in accordance with §63.1303(e).
- (4) Actual source-wide HAP emissions for each consecutive 12-month period shall be calculated as the sum of actual monthly source-wide HAP emissions for each of the individual 12 months in the period, calculated in accordance with paragraphs (c) (1) through (3) of this section.
- (d) Allowable source-wide HAP emissions for a consecutive 12-month period shall be calculated as the sum of allowable monthly source-wide HAP emissions for each of the individual 12 months in the period. Allowable

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

ER07OC98.008

Where:

 $\begin{array}{lll} emiss_{allow,\ month} = Allowable\ HAP\ ABA\\ storage\ and\ equipment\ leak\ emissions, HAP\ ABA\ emissions\ from\ the\\ production\ line,\ and\ equipment\\ cleaning\ HAP\ emissions\ from\ the\\ slabstock\ foam\ production\ source\\ for\ the\ month,\ pounds. \end{array}$

m = Number of slabstock foam production lines.

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

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.

ER07OC98.009

Where:

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

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

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.

§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.
- (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.
- (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 $\pm 1/2.0$ 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 \pm 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 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 Meas-

- uring 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 $\pm\,2.0$ 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 shall be no higher than 2,000 ppm methane and the higher concentration calibration gas shall be no higher than 10,000 ppm methane.
- (5) Monitoring shall be performed when the equipment is in HAP ABA service, in use with an acceptable surrogate volatile organic compound

which is not a HAP ABA, or is in use with any other detectable gas or vapor.

- (6) If no instrument is available onsite that will meet the performance criteria specified in section 3.1.2(a) of Method 21 of 40 CFR Part 60, appendix A, the readings from an available instrument may be adjusted by multiplying by the average response factor for the stream.
- (b) Test method to determine foam properties. The IFD and density of each grade of foam produced during each run of foam shall be determined using ASTM D3574-91, Standard Test Methods for Flexible Cellular Materials-Slab, Bonded, and Molded (incorporation by reference—see §63.14), using a sample of foam cut from the center of the foam bun. The maximum sample size for which the IFD and density is determined shall not be larger than 24 inches by 24 inches by 4 inches. For grades of foam where the owner or operator has designated the HAP ABA formulation limitation as zero, the owner or operator is not required to determine the IFD and density in accordance with this paragraph.

§63.1305 Alternative means of emission limitation.

An owner or operator of an affected source may request approval to use an alternative means of emission limitation, following the procedures in this section.

- (a) The owner or operator can request approval to use an alternative means of emission limitation in the precompliance report for existing sources, the application for construction or reconstruction for new sources, or at any time.
- (b) This request shall include a complete description of the alternative means of emission limitation.
- (c) Each owner or operator applying for permission to use an alternative means of emission limitation under §63.6(g) shall be responsible for collecting and verifying data to demonstrate the emission reduction achieved by the alternative means of emission limitation.
- (d) Use of the alternative means of emission limitation shall not begin

until approval is granted by the Administrator in accordance with $\S 63.6(g)$.

§63.1306 Reporting requirements.

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

(a) *Initial notification*. Each affected source shall submit an initial notification in accordance with §63.9(b).

- (b) Application for approval of construction or reconstruction. Each owner or operator shall submit an application for approval of construction or reconstruction in accordance with the provisions of §63.5(d).
- (c) Precompliance report. Each slabstock affected source shall submit a precompliance report no later than 12 months before the compliance date. This report shall contain the information listed in paragraphs (c)(1) through (c)(8) of this section, as applicable.
- (1) Whether the source will comply with the emission point specific limitations described in §63.1293(a), or with the source-wide emission limitation described in §63.1293(b).
- (2) For a source complying with the emission point specific limitations, whether the source will comply on a rolling annual basis in accordance with \$63.1297(b), or will comply with the monthly alternative for compliance contained in \$63.1297(c).
- (3) For a source complying with the source-wide emission limitation, whether the source will comply on a rolling annual basis in accordance with §63.1299(a), or will comply with the monthly alternative for compliance contained in §63.1299(b).
- (4) A description of how HAP ABA and/or polyol added at the mixhead will be monitored. If the owner or operator is developing an alternative monitoring program, the alternative monitoring program containing the information in §63.1303(b)(5)(i) through (iv) shall be submitted.
- (5) Notification of the intent to use a recovery device to comply with the provisions of §63.1297 or §63.1299.
- (6) For slabstock affected sources complying with §63.1297 or §63.1299 using a recovery device, the continuous recovered HAP ABA monitoring and

recordkeeping program, developed in accordance with §63.1303(c).

- (7) For sources complying with the source-wide emission limitation, a description of how the amount of HAP ABA in a storage vessel shall be determined.
- (8) For sources complying with the source-wide emission limitation, a description of how the amount of HAP ABA added to a storage vessel during a delivery will be monitored. If the owner or operator is developing an alternative monitoring program, the alternative monitoring program containing the information in §63.1303(e)(4)(i) through (iv) shall be submitted.
- (9) If the Administrator does not notify the owner or operator of objections to an alternative monitoring program submitted in accordance with (c)(4) or (c)(6) of this section, or a recovered HAP ABA monitoring and record-keeping program submitted in accordance with (c)(7) of this section, the program shall be deemed approved 45 days after its receipt by the Administrator.
- (d) Notification of compliance status. Each affected source shall submit a notification of compliance status report no later than 180 days after the compliance date. For slabstock affected sources, this report shall contain the information listed in paragraphs (d)(1) through (3) of this section, as applicable. This report shall contain the information listed in paragraph (d)(4) of this section for molded foam processes and in paragraph (d)(5) for rebond foam processes.
- (1) A list of diisocyanate storage vessels, along with a record of the type of control utilized for each storage vessel.
- (2) For transfer pumps in disocyanate service, a record of the type of control utilized for each transfer pump.
- (3) If the source is complying with the emission point specific limitations of $\S 63.1294$ through 63.1298, the information listed in paragraphs (b)(3)(i) through (iii) of this section.
- (i) A list of HAP ABA storage vessels, along with a record of the type of control utilized for each storage vessel.
- (ii) A list of pumps, valves, connectors, pressure-relief devices, and open-

ended valves or lines in HAP ABA service.

- (iii) A list of any modifications to equipment in HAP ABA service made to comply with the provisions of §63.1296.
- (4) A statement that the molded foam affected source is in compliance with §63.1300, or a statement that molded foam processes at an affected source are in compliance with §63.1300.
- (5) A statement that the rebond foam affected source is in compliance with §63.1301, or that rebond processes at an affected source are in compliance with §63.1301.
- (e) Semiannual reports. Each slabstock affected source shall submit a report containing the information specified in paragraphs (e)(1) through (5) of this section semiannually no later than 60 days after the end of each 180 day period. The first report shall be submitted no later than 240 days after the date that the Notification of Compliance Status is due and shall cover the 6-month period beginning on the date that the Notification of Compliance Status Report is due.
- (1) For slabstock affected sources complying with the rolling annual compliance provisions of either §63.1297 or §63.1299, the allowable and actual HAP ABA emissions (or allowable and actual source-wide HAP emissions) for each of the 12-month periods ending on each of the six months in the reporting period. This information is not required to be included in the initial semi-annual compliance report.
- (2) For sources complying with the monthly compliance alternative of either §63.1297 or §63.1299, the allowable and actual HAP ABA emissions (or allowable and actual source-wide HAP emissions) for each of the six months in the reporting period.
- (3) For sources complying with the storage vessel provisions of §63.1294(a) or §63.1295 using a carbon adsorption system, unloading events that occurred after breakthrough was detected and before the carbon was replaced.

- (5) Any leaks in vapor return lines that were not repaired in accordance with §63.1294(a)(1)(ii) or §63.1295(b)(2).
- (f) Other reports. (1) Change in selected emission limitation. An owner or operator electing to change their slabstock flexible polyurethane foam emission limitation (from emission point specific limitations to a sourcewide emission limitation, or vice versa), selected in accordance with §63.1293, shall notify the Administrator no later than 180 days prior to the change.
- (2) Change in selected compliance method. An owner or operator changing the period of compliance for either §63.1297 or §63.1299 (between rolling annual and monthly) shall notify the Administrator no later than 180 days prior to the change.
- (g) Annual compliance certifications. Each affected source subject to the provisions in §§ 63.1293 through 63.1301 shall submit a compliance certification annually.
- (1) The compliance certification shall be based on information consistent with that contained in §63.1308 of this section, as applicable.
- (2) A compliance certification required pursuant to a State or local operating permit program may be used to satisfy the requirements of this section, provided that the compliance certification is based on information consistent with that contained in §63.1308 of this section, and provided that the Administrator has approved the State or local operating permit program under part 70 of this chapter.
- (3) Each compliance certification submitted pursuant to this section shall be signed by a responsible official of the company that owns or operates the affected source.

§63.1307 Recordkeeping requirements.

The applicable records designated in paragraphs (a) through (c) of this section shall be maintained by owners and operators of all affected sources.

- (a) *Storage vessel records.* (1) A list of diisocyanate storage vessels, along with a record of the type of control utilized for each storage vessel.
- (2) For each slabstock affected source complying with the emission point specific limitations of §§63.1294 through

- 63.1298, a list of HAP ABA storage vessels, along with a record of the type of control utilized for each storage vessel.
- (3) For storage vessels complying through the use of a carbon adsorption system, paragraph (a)(3)(i) or (ii), and paragraph (a)(3)(iii) of this section.
- (i) Records of dates and times when the carbon adsorption system is monitored for carbon breakthrough and the monitoring device reading, when the device is monitored in accordance with §63.1303(a); or
- (ii) For affected sources monitoring at an interval no greater than 20 percent of the carbon replacement interval, in accordance with §63.1303(a)(2), the records listed in paragraphs (a)(3)(ii)(A) and (B) of this section.
- (A) Records of the design analysis, including all the information listed in §63.1303(a)(2)(i) through (iii), and
- (B) Records of dates and times when the carbon adsorption system is monitored for carbon breakthrough and the monitoring device reading.
- (iii) Date when the existing carbon in the carbon adsorption system is replaced with fresh carbon.
- (4) For storage vessels complying through the use of a vapor return line, paragraphs (a)(4)(i) through (iii) of this section.
- (i) Dates and times when each unloading event occurs and each inspection of the vapor return line for leaks occurs.
- (ii) Records of dates and times when a leak is detected in the vapor return line.
- (iii) Records of dates and times when a leak is repaired.
- (b) Equipment leak records. (1) A list of components as specified below in paragraphs (b)(1)(i) and (ii).
- (i) For all affected sources, a list of components in diisocyanate service,
- (ii) For affected sources complying with the emission point specific limitations of §§ 63.1294 through 63.1298, a list of components in HAP ABA service.
- (2) For transfer pumps in disocyanate service, a record of the type of control utilized for each transfer pump and the date of installation.
- (3) When a leak is detected as specified in $\S63.1294(b)(2)(ii)$, $\S63.1294(c)$, $\S63.1296(a)(2)$, (b)(1), (c)(1), and (d)(1),

- the requirements listed in paragraphs (b)(3)(i) and (ii) of this section apply:
- (i) Leaking equipment shall be identified in accordance with the requirements in paragraphs (b)(3)(i)(A) through (C) of this section.
- (A) A readily visible identification, marked with the equipment identification number, shall be attached to the leaking equipment.
- (B) The identification on a valve may be removed after it has been monitored for 2-successive quarters as specified in §63.1296(b)(1) and no leak has been detected during those 2 quarters.
- (C) The identification on equipment, other than a valve, may be removed after it has been repaired.
- (ii) The information in paragraphs (b)(2)(ii)(A) through (H) shall be recorded for leaking components.
- (A) The instrument and operator identification numbers and the equipment identification number.
- (B) The date the leak was detected and the dates of each attempt to repair the leak.
- (C) Repair methods applied in each attempt to repair the leak.
- (D) The words "above leak definition" if the maximum instrument reading measured by the methods specified in §63.1304(a) after each repair attempt is equal or greater than the leak definitions for the specified equipment.
- (E) The words "repair delayed" and the reason for the delay if a leak is not repaired within 15 calendar days after discovery of the leak.
- (F) The expected date of the successful repair of the leak if a leak is not repaired within 15 calendar days.
- (G) The date of successful repair of the leak.
- (H) The date the identification is removed.
- (c) HAP ABA records—(1) Emission point specific limitations—rolling annual compliance and monthly compliance alternative records. Each slabstock affected source complying with the emission point specific limitations of §1A63.1294 through 63.1298, and the rolling annual compliance provisions of §63.1297(a)(1), shall maintain the records listed in paragraphs (c)(1)(i), (ii), (iii), and (iv) of this section. Each flexible polyurethane foam slabstock source complying with the emission point specific

limitations of §§63.1294 through 63.1298, and the monthly compliance alternative of §63.1297(a)(2), shall maintain the records listed in paragraphs (c)(1)(i), (ii), and (iv) of this section.

(i) Daily records of the information listed below in paragraphs (c)(1)(i)(A) through (C) of this section.

(A) A log of foam runs each day. For each run, the log shall include a list of the grades produced during the run.

- (B) Results of the density and IFD testing for each grade of foam produced during each run of foam, conducted in accordance with the procedures in §63.1304(b). The results of this testing shall be recorded within 10 working days of the production of the foam. For grades of foam where the owner or operator has designated the HAP ABA formulation limitation as zero, the owner or operator is not required to keep records of the IFD and density.
- (C) The amount of polyol added to the slabstock foam production line at the mixhead for each run of foam, determined in accordance with §63.1303(b).
- (ii) Monthly records of the information listed in paragraphs (c)(1)(ii)(A) through (E) of this section.
- (A) A listing of all foam grades produced during the month,
- (B) For each foam grade produced, the HAP ABA formulation limitation, calculated in accordance with §63.1297(d).
- (C) With the exception of those grades for which the owner or operator has designated zero as the HAP ABA formulation limitation, the total amount of polyol used in the month for each foam grade produced.
- (D) The total allowable HAP ABA emissions for the month, determined in accordance with §63.1297(b)(2).
- (E) The total amount of HAP ABA added to the slabstock foam production line at the mixhead during the month, determined in accordance with §63.1303(b).
- (iii) Each source complying with the rolling annual compliance provisions of §63.1297(b) shall maintain the records listed in paragraphs (c)(1)(iii)(A) and (B) of this section.
- (A) The sum of the total allowable HAP ABA emissions for the month and the previous 11 months.

- (B) The sum of the total actual HAP ABA emissions for the month and the previous 11 months.
- (iv) Records of all calibrations for each device used to measure polyol and HAP ABA added at the mixhead, conducted in accordance with §63.1303(b)(3).
- (2) Source-wide limitations—rolling annual compliance and monthly compliance alternative records. Each slabstock affected source complying with the source-wide limitations of §63.1299, and the rolling annual compliance provisions in §63.1299(a), shall maintain the records listed in paragraphs (c)(2)(i) through (c)(2)(vii) of this section. Each flexible polyurethane foam slabstock source complying with the source-wide limitations of §63.1299, and the monthcompliance alternative §63.1299(b), shall maintain the records listed in paragraphs (c)(2)(i) through (c)(2)(iii) and paragraphs (c)(2)(v)through (c)(2)(vii) of this section.
- (i) Daily records of the information listed in paragraphs (c)(2)(i)(A) through (C) of this section.
- (A) A log of foam runs each day. For each run, the log shall include a list of the grades produced during the run.
- (B) Results of the density and IFD testing for each grade of foam produced during each run of foam, conducted in accordance with the procedures in §63.1304(b). The results of this testing shall be recorded within 10 working days of the production of the foam. For grades of foam where the the owner or operator has designated the HAP ABA formulation limitation as zero, the owner or operator is not required to keep records of the IFD and density.
- (C) With the exception of those grades for which the owner or operator has designated zero as the HAP ABA formulation limitation, the amount of polyol added to the slabstock foam production line at the mixhead for each grade produced during each run of foam, determined in accordance with §63.1303(b).
- (ii) For sources complying with the source-wide emission limitation, weekly records of the storage tank level, determined in accordance with §63.1303(d).

- (iii) Monthly records of the information listed below in paragraphs (c)(2)(iii)(A) through (E) of this section.
- (A) A listing of all foam grades produced during the month,
- (B) For each foam grade produced, the residual HAP formulation limitation, calculated in accordance with §63.1297(d).
- (C) With the exception of those grades for which the owner or operator has designated zero as the HAP ABA formulation limitation, the total amount of polyol used in the month for each foam grade produced.
- (D) The total allowable HAP ABA and equipment cleaning emissions for the month, determined in accordance with \$63.1297(b)(2).
- (E) The total actual source-wide HAP ABA emissions for the month, determined in accordance with $\S63.1299(c)(1)$, along with the information listed in paragraphs $(c)(2)(iii)(E)(\emph{I})$ and $(\emph{2})$ of this section.
- (1) The amounts of HAP ABA in the storage vessel at the beginning and end of the month, determined in accordance with $\S63.1299(c)(2)$; and
- (2) The amount of each delivery of HAP ABA to the storage vessel, determined in accordance with §63.1299(c)(3).
- (iv) Each source complying with the rolling annual compliance provisions of $\S63.1299(a)$ shall maintain the records listed in paragraphs (c)(2)(iv)(A) and (B) of this section.
- (A) The sum of the total allowable HAP ABA and equipment cleaning HAP emissions for the month and the previous 11 months.
- (B) The sum of the total actual HAP ABA and equipment cleaning HAP emissions for the month and the previous 11 months.
- (v) Records of all calibrations for each device used to measure polyol added at the mixhead, conducted in accordance with §63.1303(b)(3).
- (vi) Records of all calibrations for each device used to measure the amount of HAP ABA in the storage vessel, conducted in accordance with §63.1303(d)(1).
- (vii) Records to verify that all scales used to measure the amount of HAP ABA added to the storage vessel meet the requirements of §63.1303(e)(3). For scales meeting the criteria of

- §63.1303(e)(3)(i), this documentation shall be in the form of written confirmation of the State or local approval. For scales complying with \$63.1303(e)(3)(ii), this documentation shall be in the form of a report provided by the registered scale technician.
- (d) The owner or operator of each affected source complying with \$63.1297 or \$63.1299 through the use of a recovery device shall maintain the following records:
- (1) A copy of the recovered HAP ABA monitoring and recordkeeping program, developed pursuant to §63.1303(c);
- (2) Certification of the accuracy of the monitoring device,
- (3) Records of periodic calibration of the monitoring devices,
- (4) Records of parameter monitoring results, and
- (5) The amount of HAP ABA recovered each time it is measured.
- (e) The owner or operator of an affected source subject to §63.1298 of this subpart shall maintain a product data sheet for each equipment cleaner used which includes the HAP content, in kg of HAP/kg solids (lb HAP/lb solids).
- (f) The owner or operator of an affected source following the compliance methods in §63.1308(b)(1) and (c)(1) shall maintain records of each use of a vapor return line during unloading, of any leaks detected during unloading, and of repairs of leaks detected during unloading.
- (g) The owner or operator of an affected source subject to §63.1300 or §63.1301 of this subpart shall maintain a product data sheet for each compound other than diisocyanates used to flush the mixhead and associated piping during periods of startup or maintenance, which includes the HAP content, in kg of HAP/kg solids (lb HAP/lb solids), of each solvent other than diisocyanates used to flush the mixhead and associated piping during periods of startup or maintenance.
- (h) The owner or operator of an affected source subject to §63.1300 or §63.1301 of this subpart shall maintain a product data sheet for each mold release agent used that includes the HAP content, in kg of HAP/kg solids (lb

HAP/lb solids), of each mold release agent.

§63.1308 Compliance demonstrations.

- (a) For each affected source, compliance with the requirements listed in paragraphs (a)(1) through (a)(2) of this section shall mean compliance with the requirements contained in §§ 63.1293 through 63.1301, absent any credible evidence to the contrary.
- (1) The requirements described in Tables 3, 4, and 5 of this subpart; and
- (2) The requirement to submit a compliance certification annually as required under §63.1306(g).
- (b) All slabstock affected sources. For slabstock affected sources, failure to meet the requirements contained in §63.1294 shall be considered a violation of this subpart. Violation of each item listed in the paragraphs (b)(1) through (b)(6) of this section, as applicable, shall be considered a separate violation.
- (1) For each affected source complying with §63.1294(a) in accordance with §63.1294(a)(1), each unloading occurs when event that diisocyanate storage vessel is equipped with a vapor return line from the storage vessel to the tank truck or rail car, each unloading event that occurs when the vapor line is not connected, each unloading event that the vapor line is not inspected for leaks as described in §63.1294(a)(1)(i), each unloading event that occurs after a leak has been detected and not repaired, and each calendar day after a leak is detected, but not repaired as soon as practicable;
- (2) For each affected source complying with \$63.1294(a) in accordance with \$63.1294(a)(2), each unloading event that the diisocyanate storage vessel is not equipped with a carbon adsorption system, each unloading event (or each month if more than one unloading event occurs in a month) that the carbon adsorption system is not monitored for breakthrough in accordance with \$63.1303(a)(3) or (4), and each unloading event that occurs when the carbon is not replaced after an indication of breakthrough;
- (3) For each affected source complying with §63.1294(a) in accordance with §63.1294(a)(2) through the alter-

- native monitoring procedures in §63.1303(a)(2), each unloading event that the diisocyanate storage vessel is not equipped with a carbon adsorption system, each time that the carbon adsorption system is not monitored for breakthrough in accordance with §63.1303(a)(3) or (4) at the interval established in the design analysis, and each unloading event that occurs when the carbon is not replaced after an indication of breakthrough;
- (4) For each affected source complying with §63.1294(b) in accordance with §63.1294(b)(1), each calendar day that a transfer pump in disocyanate service is not a sealless pump;
- (5) For each affected source complying with §63.1294(b) in accordance with §63.1294(b)(2), each calendar day that a transfer pump in diisocyanate service is not submerged as described in §63.1294(b)(2)(i), each week that the pump is not visually monitored for leaks, each calendar day after 5 calendar days after detection of a leak that a first attempt at repair has not in accordance made §63.1294(b)(2)(iii)(B), and the earlier of each calendar day after 15 calendar days after detection of a leak that a leak is not repaired, or a leak is not repaired as soon as practicable, each subsequent calender day (with the exception of situations meeting the criteria of §63.1294(d));
- (6) For each affected source complying with \$63.1294(c), each calendar day after 5 calendar days after detection of a leak that a first attempt at repair has not been made, and the earlier of each calendar day after 15 calendar days after detection of a leak that a leak is not repaired, or if a leak is not repaired as soon as practicable, each subsequent calender day (with the exception of situations meeting the criteria of \$63.1296(f)).
- (c) Slabstock affected sources complying with the emission point specific limitations. For slabstock affected sources complying with the emission point specific limitations as provided in §63.1293(a), failure to meet the requirements contained in §63.1295 through 63.1298 shall be considered a violation of this subpart. Violation of each item listed in the paragraphs (c)(1) through (c)(17) of this section, as applicable,

shall be considered a separate violation.

(1) For each affected source complying with §63.1295(a) in accordance with §63.1295(b), each unloading event that occurs when the HAP ABA storage vessel is not equipped with a vapor return line from the storage vessel to the tank truck or rail car, each unloading event that occurs when the vapor line is not connected, each unloading event that the vapor line is not inspected for leaks as described in §63.1295(b)(1), each unloading event that occurs after a leak has been detected and not repaired, and each calendar day after a leak is detected but not repaired as soon as practicable;

(2) For each affected source complying with §63.1295(a) in accordance with §63.1295(c), each unloading event that the HAP ABA storage vessel is not equipped with a carbon adsorption system, each unloading event (or each month if more than one unloading event occurs in a month) that the carbon adsorption system is not monitored for breakthrough in accordance with §63.1303(a)(3) or (4), and each unloading event that occurs when the carbon is not replaced after an indica-

tion of breakthrough;

(3) For each affected source complying with §63.1295(a) in accordance with §63.1295(c) through the alternative monitoring procedures in §63.1303(a)(2), each unloading event that the HAP ABA storage vessel is not equipped with a carbon adsorption system, each time that the carbon adsorption system is not monitored for breakthrough in accordance with §63.1303(a)(3) or (4) at the interval established in the design analysis, and each unloading event that occurs when the carbon is not replaced after an indication of breakthrough;

(4) For each affected source complying with §63.1296(a) in accordance with §63.1296(a)(1), each calendar day that a transfer pump in HAP ABA serv-

ice is not a sealless pump;

(5) For each affected source complying with §63.1296(a) in accordance with §63.1296(a)(2), each week that a visual inspection of a pump in HAP ABA service is not performed, each quarter that a pump in HAP ABA service is not monitored to detect leaks in

accordance with §63.1304(a), each calendar day after 5 calendar days after detection of a leak that a first attempt at repair has not been made in accordance with §63.1296(b)(2)(iii)(B), and the earlier of each calendar day after 15 calendar days after detection of a leak that a leak is not repaired, or if a leak is not repaired as soon as practicable, each subsequent calender day (with the exception of situations meeting the criteria of §63.1296(f));

(6) For each affected source complying with §63.1296(b) in accordance with §63.1296(b)(1) and (2), each quarter that a valve in HAP ABA service is not monitored to detect leaks in accordance with §63.1304(a), each calendar day after 5 calendar days after detection of a leak that a first attempt at repair has not been made in accordance with §63.1296(b)(2)(ii), and each calendar day after 15 calendar days after detection of a leak that a leak is not repaired, or if a leak is not repaired as soon as practicable, whichever is earlier (with the exception of situations meeting the criteria of §63.1296(f));

(7) For each affected source complying with §63.1296(b)(3) for each valve designated as unsafe to monitor as described in §63.1296(b)(3)(i), failure to develop the written plan required by §63.1296(b)(3)(ii), each period specified in the written plan that an unsafe-tomonitor valve in HAP ABA service is not monitored, and each calendar day in which a leak is not repaired in accordance with the written plan;

(8) For each affected source complying with §63.1296(b)(4) for one or more valves designated as difficult-tomonitor in accordance §63.1296(b)(4)(i) and (ii), failure to develop the written plan required by §63.1296(b)(4)(iii), each calendar year that a difficult-to-monitor valve in HAP ABA service is not monitored, and each calendar day in which a leak is not repaired in accordance with the

written plan;

(9) For each affected source complying with §63.1296(c) in accordance with §63.1296(c)(1) and (2), each year that a connector in HAP ABA service is not monitored to detect leaks in accordance with §63.1304(a); each calendar day after 3 months after a connector has been opened, has otherwise

had the seal broken, or a leak is repaired, that each connector in HAP ABA service is not monitored to detect leaks in accordance with §63.1304(a); each calendar day after 5 calendar days after detection of a leak that a first attempt at repair has not been made, and the earlier of each calendar day after 15 calendar days after detection of a leak that a leak is not repaired, or if a leak is not repaired as soon as practicable, each subsequent calendar day (with the exception of situations meeting the criteria of §63.1296(f));

(10) For each affected source complying with §63.1296(c)(3) for one or more connectors designated as unsafeto-monitor in accordance with $\S63.1296(c)(3)(i)$, failure to develop the written plan required §63.1296(c)(3)(ii), each period specified in the written plan that an unsafe-tomonitor valve in HAP ABA service is not monitored, each calendar day after 5 calendar days after detection of a leak of an unsafe-to-monitor connector that a first attempt at repair has not been made, and the earlier of each calendar day after 15 calendar days after detection of a leak that a leak is not repaired, or if a leak is not repaired as soon as practicable, each subsequent calender day (with the exception of situations meeting the criteria §63.1296(f));

(11) For each affected source complying with §63.1296(c)(4) for one or more connectors designated as unsafe to repair, each year that one or more unsafe-to-repair connectors in HAP ABA service is not monitored to detect leaks in accordance with §63.1304(a); each calendar day after 3 months after one or more unsafe-to-repair connectors has been opened, has otherwise had the seal broken, or a leak is repaired, that each unsafe-to-repair connector in HAP ABA service is not monitored to detect leaks in accordance with §63.1304(a); and the earlier of each calendar day after six-months after detection of a leak that a leak is not repaired, or if a leak is not repaired as soon as practicable, each subsequent calendar day:

(12) For each affected source complying with $\S63.1296(d)$ in accordance with $\S63.1296(d)(1)$ and (2), each calendar day after the 5 days that the

pressure-relief device has not been monitored in accordance §63.1304(a) after a potential leak was discovered as described in §63.1296(d)(1), each calendar day after 5 calendar days after detection of a leak that a first attempt at repair has not been made, and the earlier of each calendar day after 15 calendar days after detection of a leak that a leak is not repaired, or if a leak is detected and not repaired as soon as practicable, each subsequent calendar day (with the exception of situations meeting the criteria of §63.1296(f));

(13) For each affected source complying with \$63.1296(e) in accordance with \$63.1296(e)(1) through (5), each calendar day that an open-ended valve or line has no cap, blind flange, plug or second valve as described in \$63.1296(e)(2), and each calendar day that a valve on the process fluid end of an open-ended valve or line equipped with a second valve is not closed before the second valve is closed;

(14) For each affected source complying with §63.1297(a) in accordance with the rolling annual compliance option in §63.1297(a)(1) and (b), each calendar day in the 12-month period for which the actual HAP ABA emissions exceeded the allowable HAP ABA emissions level, each calendar day in which foam is being poured where the amount of polyol added at the mixhead is not monitored (as required) in accordance with §63.1303(b)(1)(i), each calendar day in which foam is being poured where the amount of HAP ABA added at the mixhead is not monitored (as required) in accordance with §63.1303(b)(1)(ii), each calendar day in a 6-month period in which the polyol pumps are not caliaccordance with brated in §63.1303(b)(3)(i), each calendar day in a month in which the HAP ABA pumps are not calibrated in accordance with §63.1303(b)(3)(ii), and each calendar day after 10 working days after production where the IFD and density of a foam grade are not determined (where required) in accordance with §63.1304(b);

(15) For each affected source complying with §63.1297(a) in accordance with the monthly compliance option in §63.1297(a)(2) and (c), each calendar day of each month for which the actual HAP ABA emissions exceeded the allowable HAP ABA emissions level for

that month, each calendar day in which foam is being poured where the amount of polyol added at the mixhead is not monitored (as required) in accordance with $\S63.1303(b)(\bar{1})(i)$, each calendar day in which foam is being poured where the amount of HAP ABA added at the mixhead is not monitored (as required) in accordance with \$63.1303(b)(1)(ii), each 6-month period in which the polyol pumps are not calibrated accordance with in §63.1303(b)(3)(i), each month in which the HAP ABA pumps are not calibrated in accordance with §63.1303(b)(3)(ii), and each calendar day after 10 working days after production where the IFD and density of a foam grade are not determined (where required) in accordance with §63.1304(b);

(16) For each affected source complying with \$63.1297(a) by using a recovery device as allowed under \$63.1297(e), the items listed in (c)(16)(i) or (ii) of this section, as applicable.

(i) If complying with rolling annual compliance option in §63.1297(a)(1) and (b), each item listed in (c)(14) of this section, failure to develop a recovered HAP ABA monitoring and record-keeping program in accordance with §63.1303(c), and each instance when an element of the program is not followed.

(ii) If complying with the monthly compliance option in §63.1297(a)(2) and (c), each item listed in (c)(15) of this section, failure to develop a recovered HAP ABA monitoring and record-keeping program in accordance with \$63.1303(c), and each instance when an element of the program is not followed.

(17) For each affected source complying with §63.1298, each calendar day that a HAP or any HAP-based material is used as an equipment cleaner.

(d) Slabstock affected sources complying with the source-wide emission limitation. For slabstock affected sources complying with the source-wide emission limitation as provided in §63.1293(b), failure to meet the requirements contained in §63.1299 shall be considered a violation of this subpart. Violation of each item listed in the paragraphs (d)(1) through (d)(3) of this section, as applicable, shall be considered a separate violation.

(1) For each affected source complying with §63.1299 in accordance with

the rolling annual compliance option in §63.1299(a), each calendar day in the 12-month period for which the actual HAP ABA emissions exceeded the allowable HAP ABA emissions level, each calendar day in which foam is being poured where the amount of polyol added at the mixhead is not monitored (as required) in accordance with §63.1303(b)(1)(i), each calendar day in a week in which the amount of HAP ABA in a storage vessel is not determined in accordance with §63.1303(d), each delivery of HAP ABA in which the amount of HAP ABA added to the storage vessel is not determined in accordance with §63.1303(e), each calendar day in a 6-month period in which the polyol pumps are not calibrated in accordance with §63.1303(b)(3)(i), and each calendar day after 10 working days after production where the IFD and density of a foam grade are not determined (where required) in accordance with § 63.1304(b);

(2) For each affected source complying with §63.1299 in accordance with the monthly compliance option in §63.1299(b), each calendar day of each month for which the actual HAP ABA emissions exceeded the allowable HAP ABA emissions level for that month, each calendar day in which foam is being poured where the amount of polyol added at the mixhead is not monitored (as required) in accordance with §63.1303(b)(1)(i), each calendar day in a week in which the amount of HAP ABA in a storage vessel is not determined in accordance with §63.1303(d), each delivery of HAP ABA in which the amount of HAP ABA added to the storage vessel is not determined in accordance with §63.1303(e), and each calendar day in a 6-month period in which the polyol pumps are not calibrated in accordance with §63.1303(b)(3)(i), and each calendar day after 10 working days after production where the IFD and density of a foam grade are not determined (where required) in accordance with §63.1304(b).

(3) For each affected source complying with §63.1299 by using a recovery device as allowed under §63.1299(e), the items listed in (d)(3)(i) or (ii) of this section, as applicable.

(i) If complying with rolling annual compliance option in §63.1299(a), each

item listed in (d)(1) of this section, failure to develop a recovered HAP ABA monitoring and recordkeeping program in accordance with $\S 63.1303(c)$, and each instance when an element of the program is not followed.

- (ii) If complying with the monthly compliance option in §63.1299(b), each item listed in (d)(2) of this section, failure to develop a recovered HAP ABA monitoring and recordkeeping program in accordance with §63.1303(c), and each instance when an element of the program is not followed.
- (e) Molded and rebond foam affected sources. For molded and rebond foam affected sources, failure to meet the requirements contained in §63.1300 and §63.1301, respectively, shall be considered a violation of this subpart. Violation of each item listed in the following paragraphs shall be considered a separate violation.
- (1) For each molded foam affected source subject to the provisions in §63.1300(a), each calendar day that a HAP-based material is used as an equipment cleaner (except for diisocyanates 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);
- (2) For each molded foam affected source subject to the provisions of

§63.1300(b), each calendar day that a HAP-base material is used as a mold release agent;

- (3) For each rebond foam affected source subject to the provisions of §63.1301(a), each calendar day that a HAP-based material is used as an equipment cleaner; and
- (4) For each rebond foam affected source complying with §63.1301(b), each calendar day that a HAP-based mold release agent is used.

§63.1309 Delegation of authority.

- (a) In delegating implementation and enforcement authority to a State under §112(d) of the Clean Air Act, the authorities contained in paragraph (b) of this section shall be retained by the Administrator and not transferred to a State.
- (b) The authority conferred in §63.1303(b)(5) and §63.1305(d) shall not be delegated to any State.

APPENDIX TO SUBPART III—TABLES

For the convenience of the readers of subpart III, the tables below summarize the requirements in §§63.1290 to 63.1307. These tables are intended to assist the reader in determining the requirements applicable to affected sources and do not alter an affected source's obligation to comply with the requirements in §§63.1290 to 63.1307.

TABLE 1 TO SUBPART III—HAP ABA FORMULATION LIMITATIONS MATRIX FOR NEW SOURCES [see §63.1297(d)(2)]

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Table 2 to Subpart III—Applicability of General Provisions (40 CFR Part 63, Subpart A) to Subpart III.

Subpart A reference	Applies to subpart III	Comment
§ 63.1	YES	Except that §63.1(c)(2) is not applicable to the extent area sources are not subject to subpart III.
§63.2	YES	Definitions are modified and supplemented by §63.1292.
§ 63.3	YES	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
§ 63.4	YES	
§ 63.5	YES	
§ 63.6 (a)–(d)	YES	
§ 63.6(e) (1)–(2)	YES	
§ 63.6(e)(3)	NO	Owners and operators of subpart III affected sources are not required to develop and implement a startup, shutdown, and malfunction plan.
§ 63.6 (f)–(g)	YES	'
§ 63.6(h)	NO	Subpart III does not require opacity and visible emission standards.
§ 63.6 (i)–(j)	YES	
§ 63.7	NO	Performance tests not required by subpart III.
§63.8	NO	Continuous monitoring, as defined in subpart A, is not required by subpart III.
§63.9 (a)–(d)	YES	
§ 63.9 (e)–(g)	NO	
§ 63.9(h)	NO	Subpart III specifies Notification of Compliance Status requirements.
§ 63.9 (i)–(j)	YES	
§ 63.10 (a)–(b)	YES	Except that the records specified in §63.10(b)(2)(vi) through (xi) and (xiii) are not required.
§ 63.10(c)	NO	

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Table 2 to Subpart III—Applicability of General Provisions (40 CFR Part 63, Subpart A) to Subpart III.—Continued

Subpart A reference	Applies to subpart III	Comment
\$63.10(d)(1) \$63.10 (d) (2)–(3) \$63.10 (d) (4)–(5) \$63.10(e) \$63.10(f) \$63.12 \$63.12 \$63.13 \$63.14	YES NO YES NO YES YES YES YES YES YES YES	

TABLE 3 TO SUBPART III.—COMPLIANCE REQUIREMENTS FOR SLABSTOCK FOAM PRODUCTION AFFECTED SOURCES COMPLYING WITH THE EMISSION POINT SPECIFIC LIMITATIONS

Reporting § 63.1306(e)(1). § 63.1306(e)(2). § 63.1306(e)(4). § 63.1306(e)(4). § 63.1306(e)(4). § 63.1306(e)(4). § 63.1306(e)(5). § 63.1306(e)(3) § 63.1306(e)(3) § 63.1306(e)(3) § 63.1306(e)(5) § 63.1306(e)(3) § 63.1304(e)(4) § 63.1304(e)(4) § 63.1304(e)(4) § 63.1306(e)(4) § 63.1306(e)(4) § 63.1306(e)(4) § 63.1307(a)(1), (3)(ii), and (3)(iii) § 63.1307(a)(2), (3)(ii), and (3)(iii) § 63.1307(a)(1), (3)(i), and (3)(iii) § 63.1307 (b)(1)(i), (2), and (3) § 63.1307 (b)(1)(i) and (3) § 63.1307(a)(2), (3)(i), (3)(iii) Recordkeeping § 63.1307 (b)(1)(ii), and (4) § 63.1307 (b)(1)(ii) and (4) § 63.1307 (b)(1)(ii) and (4) § 63.1307 (b)(1)(ii) and (3) § 63.1307 (b)(1)(ii) and (3) § 63.1307 (b)(1)(ii) and (3) § 63.1307 (b)(1)(i) and (2) § 63.1307(a)(1) and (4) § 63.1307(a)(2) and (4) § 63.1307 (b)(1)(ii) § 63.1307 (b)(1)(ii) § 63.1307(c)(1) . § 63.1307(c)(1) . § 63.1303(a)(1), (3), and (4). § 63.1303(a)(2), (3) and (4) § 63.1303(a)(1), (3), and (4). § 63.1303(a)(2), (3) and (4) § 63.1296(c)(1) and § 63.1304(a). § 63.1296(c)(3) (iii) and § 63.1304(a). § 63.1296(a)(2)(i), (2)(ii) § 63.1296(b)(4)(iv) and § 63.1296(c)(1) § 63.1296 (d)(1) and § 63.1304(a). § 63.1296 (b)(1) and § 63.1304(a). and § 63.1304(a). § 63.1296 (b)(3)(iii) Monitoring § 63.1294 (b)(2)(ii) § 63.1294(c) § 63.1294(a)(1)(i) § 63.1295 (b)(1) § 63.1304(a) § 63.1303 (b) . § 63.1303 (b) . | | i and §63.1296(b), and (b)(2) §63.1296(b)(3) (i), (ii), and §63.1296(b)(4) (i), (ii), (iii), Emission, work practice, and equipment standards §63.1296(a)(2) and (2)(iii) §63.1294(b)(2)(i) and (iii) §63.1294(c) §63.1294(a)(1) and (1)(ii) §63.1297(a)(1) and (b) §63.1297(a)(2) and (c) §63.1295(b) and (b)(2) \$63.1296(c) and (c)(2) \$63.1296(a)(1) §63.1294(a)(2) §63.1294(a)(2) §63.1294(b)(1) \$63.1296(e) §63.1295(c) §63.1295(c) and (v). Emission point compliance Rolling annual compliance Carbon adsorber—alter-Carbon adsorber—alter-Quarterly monitoring Monthly compliance Quarterly monitoring native monitoring. native monitoring. Submerged pump N/A Difficult-to-monitor Annual monitoring Unsafe-to-monitor Jnsafe-to-monitor Carbon adsorber Carbon adsorber Unsafe-to-repair Sealless pump Sealless pump Vapor balance Vapor balance Α× Ϋ́ Open-ended valves or lines § 63.1296(e). Production line § 63.1297 ... HAP ABA storage vessels § 63.1295 Diisocyanate storage vessels §63.1294(a) Other components in disocyanate service § 63.1294(c). Pressure-relief devices Diisocyanate transfer pumps §63.1294(b) HAP ABA Connectors Emission point HAP ABA pumps § 63.1296(a): HAP ABA valves § 63.1296(b): § 63.1296(c):. § 63.1296(d)

TABLE 3 TO SUBPART III.—COMPLIANCE REQUIREMENTS FOR SLABSTOCK FOAM PRODUCTION AFFECTED SOURCES COMPLYING WITH THE EMISSION POINT SPECIFIC LIMITATIONS—CONTINUED

mission point	Emission point compliance Emission, work practice, and equipment standards	Emission, work practice, and equipment standards	Monitoring	Recordkeeping	Reporting
-	Compliance Using a Recovery device.	§63.1297(a)(1), (b), and (e) for rolling annual compliance or §63.1297(a)(2), (c), and (e) for monthly compliance.	§ 63.1303 (b) and (c)	\$63.1297(a)(1), (b), and (c)	§63.1306(e)(1) or (2).
Equipment Cleaning § 63.1298.	N/A	§63.1298	§63.1298	§ 63.1307(e)	

TABLE 4 TO SUBPART III.—COMPLIANCE REQUIREMENTS FOR SLABSTOCK FOAM PRODUCTION AFFECTED SOURCES COMPLYING WITH THE SOURCE-WIDE EMISSION LIMITATION

Emission point	Emission point compliance option	Emission, work practice, and equipment standards	Monitoring	Recordkeeping	Reporting
Diisocyanate storage vessels §63.1294(a).	Vapor balance	§63.1294(a)(1) and (1)(ii)	§ 63.1294(a)(1)(i)	§ 63.1307(a)(1) and (4)	§ 63.1306(e)(5).
	Carbon adsorber	§63.1294(a)(2) §63.1303(a)(1), (3), and (4).		§ 63.1307(a)(1), (3)(i), and (3)(iii)	§ 63.1306(e)(3).
	Carbon adsorber—alter- native monitoring.	§63.1294(a)(2)	§ 63.1303(a)(2), (3) and (4)	\$63.1294(a)(2)	§ 63.1306(e)(3).
Diisocyanate transfer pumps §63.1294(b).	Sealless pump	§63.1294(b)(1)		Sealless pump	
	Submerged pump	§63.1294(b)(2)(i) and (iii)	§63.1294(b)(2)(i) and (iii) §63.1294 (b)(2)(ii)	§63.1307 (b)(1)(i), (2), and (3) §63.1306(e)(4).	§ 63.1306(e)(4).
Other components in disocyanate service 8 63.1294(c).	N/A	§63.1294(c)	§63.1294(c) §63.1294(c)	§63.1307 (b)(1)(i) and (3)	§ 63.1306(e)(4).
HAP ABA storage vessels, equipment leaks, produc-	Rolling annual compliance	§63.1299(a), (c)(1) through (4), and (d).	§ 63.1303 (b) except (b)(1)(ii), (d), and (e).	§ 63.1307(c)(2)	§ 63.1306(e)(1).
tion line, and equipment cleaning.					
	Monthly compliance	§63.1299(b), (c)(1)	§ 63.1303 (b) except	§ 63.1307(c)(2)	§ 63.1306(e)(2).
	Compliance Using a Re-	§63.1299(a), (d), and (e)	§ 63.1303 (b) except	§63.1307(c)(2) and (d)	§ 63.1306(e)(1) or (2).
	covery device.	ance or § 63.1299(b),	(b)(1)(ii) and (c).		
		(d), and (e) for monthly compliance.			

Reporting TABLE 5 TO SUBPART III.—COMPLIANCE REQUIREMENTS FOR MOLDED AND REBOND FOAM PRODUCTION AFFECTED SOURCES Recordkeeping § 63.1307(g) ... § 63.1307 (h) ... § 63.1307 (g) . § 63.1307 (h) . Monitoring Emission, work practice, and equipment standards §63.1300(a) §63.1300(b) §63.1301(a) . §63.1301(b) . Emission point compliance option ₹ Ž Ž ₹ ŽŽ Molded Foam
Equipment cleaning
Mold release agent
Rebond Foam
Equipment cleaning
Mold release agent Emission point