§ 63.1293   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 diisocyanate 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.

§ 63.1294   Standards for slabstock flexible polyurethane foam production—diisocyanate 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.

(ii) 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 diisocyanate service. Each transfer pump in diisocyanate 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.

(ii) The pump shall be completely immersed in bis(2-ethylhexyl)phthalate (DEHP, CAS #118–81–7), 2(methyloctyl)phthalate (DINP, CAS #68315–48–0), or another neutral oil.

(ii) 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 diisocyanate 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 railcar 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.