

§ 65.144

40 CFR Ch. I (7-1-08 Edition)

(i) The owner or operator shall eliminate the indications of the leak.

(ii) The owner or operator shall monitor the equipment according to the procedures in paragraph (c) of this section.

(2) Leaks as indicated by an instrument reading greater than 500 parts per million by volume above background shall be repaired as soon as practical except as provided in paragraph (d)(3) of this section. Records shall be generated as specified in § 65.163(a)(3) when a leak is detected.

(i) A first attempt at repair shall be made no later than 5 calendar days after the leak is detected.

(ii) Except as provided in paragraph (d)(3) of this section, repairs shall be completed no later than 15 calendar days after the leak is detected or at the beginning of the next introduction of vapors to the system, whichever is later.

(3) Delay of repair of a closed vent system for which leaks have been detected is allowed if repair within 15 days after a leak is detected is technically infeasible without a closed vent system shutdown, as defined in § 65.2, or if the owner or operator determines that emissions resulting from immediate repair would be greater than the emissions likely to result from delay of repair. Repair of such equipment shall be completed as soon as practical, but not later than the end of the next closed vent system shutdown.

**§ 65.144 Fuel gas systems and processes to which storage vessel, transfer rack, or equipment leak regulated material emissions are routed.**

(a) *Equipment and operating requirements for fuel gas systems and processes.*

(1) Except during periods of startup, shutdown, and malfunction as specified in § 65.3(a), the fuel gas system or process shall be operating at all times when regulated material emissions are routed to it.

(2) The owner or operator of a transfer rack subject to the provisions of this subpart shall ensure that no pressure relief device in the transfer rack's system returning vapors to a fuel gas system or process shall open to the atmosphere during loading. Pressure re-

lief devices needed for safety purposes are not subject to this paragraph (a)(2).

(3) Each process piping system collecting regulated material from a transfer rack shall be designed and operated so that regulated material vapors collected at one loading arm will not pass through another loading arm in the rack to the atmosphere.

(b) *Fuel gas system and process compliance determination.* (1) If emissions are routed to a fuel gas system, there is no requirement to conduct a performance test or design evaluation.

(2) For storage vessels and transfer racks, and if emissions are routed to a process, the regulated material in the emissions shall predominantly meet one of, or a combination of, the following conditions, and the compliance demonstration requirements in paragraph (b)(3) of this section, if applicable:

(i) Recycled and/or consumed in the same manner as a material that fulfills the same function in that process;

(ii) Transformed by chemical reaction into materials that are not regulated materials;

(iii) Incorporated into a product; and/or

(iv) Recovered.

(3) To demonstrate compliance with paragraph (b)(2) of this section for a storage vessel, the owner or operator shall prepare a design evaluation (or engineering assessment) that demonstrates the extent to which one or more of the conditions specified in paragraphs (b)(2)(i) through (iv) of this section are being met. The owner or operator shall submit the design evaluation as specified in § 65.165(a)(1).

(c) *Statement of connection to fuel gas system.* For storage vessels and transfer racks, the owner or operator shall submit the statement of connection reports for fuel gas systems specified in § 65.165(a)(2) and/or (a)(3), as appropriate.

**§ 65.145 Nonflare control devices used to control emissions from storage vessels or low-throughput transfer racks.**

(a) *Nonflare control device equipment and operating requirements.* The owner or operator shall operate and maintain the nonflare control device, including a

halogen reduction device for a low-throughput transfer rack, so that the monitored parameters defined as required in paragraph (c) of this section remain within the ranges specified in the Initial Compliance Status Report whenever emissions of regulated material are routed to the control device and halogen reduction device, except during periods of startup, shutdown, and malfunction as specified in § 65.3(a).

(b) *Nonflare control device design evaluation or performance test requirements.* When using a control device other than a flare, the owner or operator shall comply with the requirements in paragraph (b)(1)(i), (ii), or (iii) of this section except as provided in paragraph (b)(2) of this section. Owners or operators of halogenated low-throughput transfer rack vent streams routed to a combustion device and then to a halogen reduction device to meet the specifications of § 65.83(b)(1), must also meet the requirements of paragraph (b)(3) of this section.

(1) Unless a design evaluation or performance test as required in the referencing subpart was previously conducted and submitted for the storage vessel or low-throughput transfer rack, the owner or operator shall either prepare and submit with the Initial Compliance Status Report, as specified in § 65.165(b), a design evaluation that includes the information specified in paragraph (b)(1)(i) of this section, or the results of the performance test as described in paragraph (b)(1)(ii) or (iii) of this section.

(i) *Design evaluation.* The design evaluation shall include documentation demonstrating that the control device being used achieves the required control efficiency during the reasonably expected maximum storage vessel filling or transfer loading rate. This documentation is to include a description of the gas stream that enters the control device, including flow and regulated material content; and additionally for storage vessels, the effects of varying liquid level conditions; and the information specified in paragraphs (b)(1)(i)(A) through (E) of this section, as applicable. This documentation shall be submitted with the Initial

Compliance Status Report as specified in § 65.165(b).

(A) The efficiency determination is to include consideration of all vapors, gases, and liquids, other than fuels, received by the control device.

(B) If an enclosed combustion device with a minimum residence time of 0.5 seconds and a minimum temperature of 760 °C is used to meet the emission reduction requirement specified in § 65.42(b)(5) for storage vessels, or § 65.83(a)(1) for transfer racks, documentation that those conditions exist is sufficient to meet the requirements of paragraph (b)(1)(i) of this section.

(C) Except as provided in paragraph (b)(1)(i)(B) of this section for enclosed combustion devices, the design evaluation shall include the estimated autoignition temperature of the stream being combusted, the flow rate of the stream, the combustion temperature, and the residence time at the combustion temperature.

(D) For carbon adsorbers, the design evaluation shall include the estimated affinity of the regulated pollutant vapors for carbon, the amount of carbon in each bed, the number of beds, the humidity, the temperature, the flow rate of the inlet stream and, if applicable, the desorption schedule, the regeneration stream pressure or temperature, and the flow rate of the regeneration stream. For vacuum desorption, pressure drop shall be included.

(E) For condensers, the design evaluation shall include the final temperature of the stream vapors, the type of condenser, and the design flow rate of the emission stream.

(ii) *Performance test.* A performance test is acceptable to demonstrate compliance with § 65.42(b)(5) for storage vessels, and § 65.83(a)(1) for low-throughput transfer racks. The owner or operator is not required to prepare a design evaluation for the control device as described in paragraph (b)(1)(i) of this section if a performance test will be performed that meets the following criteria:

(A) The performance test demonstrates that the control device achieves greater than or equal to the required control efficiency specified in § 65.42(b)(5) for storage vessels, or § 65.83(a)(1) for transfer racks; and

(B) The performance test meets the applicable performance test requirements of §§ 65.157 and 65.158, and the results are submitted as part of the Initial Compliance Status Report as specified in § 65.165(b).

(iii) If the control device used to comply with § 65.42(b)(5) for storage vessels, or with § 65.83(a)(1) for low-throughput transfer racks, as applicable, is also used to comply with § 65.63(a)(2) for process vents, or § 65.83(a)(1) for high-throughput transfer racks, a performance test required by §§ 65.148(b), 65.149(b), 65.150(b), 65.151(b), 65.152(b), or 65.155(b) is acceptable to demonstrate compliance with § 65.42(b)(5) for storage vessels, or § 65.83(a)(1) for low-throughput transfer racks, as applicable. The owner or operator is not required to prepare a design evaluation for the control device as described in paragraph (b)(1)(i) of this section, if a performance test will be performed which meets the following criteria:

(A) The performance test demonstrates that the control device achieves greater than or equal to the required control efficiency specified in § 65.42(b)(5) for storage vessels, or § 65.83(a)(1) for transfer racks; and

(B) The performance test is submitted as part of the Initial Compliance Status Report as specified in § 65.165(b).

(2) A design evaluation or performance test is not required if the owner or operator uses a combustion device meeting the criteria in paragraph (b)(2)(i), (ii), (iii), or (iv) of this section and reports as specified in § 65.165(f).

(i) A boiler or process heater with a design heat input capacity of 44 megawatts (150 million British thermal units per hour) or greater.

(ii) A boiler or process heater burning hazardous waste for which the owner or operator meets either of the following requirements:

(A) The boiler or process heater has been issued a final permit under 40 CFR part 270 and complies with the requirements of 40 CFR part 266, subpart H; or

(B) The boiler or process heater has certified compliance with the interim status requirements of 40 CFR part 266, subpart H.

(iii) A hazardous waste incinerator for which the owner or operator meets either of the following requirements:

(A) The incinerator has been issued a final permit under 40 CFR part 270 and complies with the requirements of 40 CFR part 264, subpart O; or

(B) The incinerator has certified compliance with the interim status requirements of 40 CFR part 265, subpart O.

(iv) A boiler or process heater into which the vent stream is introduced with the primary fuel.

(3) *Halogen reduction devices used for transfer racks.* Unless a design evaluation or performance test as required in the referencing subpart was previously conducted and submitted for a halogen reduction device following a combustion device for a low-throughput transfer rack, the owner or operator shall either prepare and submit with the Initial Compliance Status Report, as specified in § 65.165(b), a design evaluation that includes the information specified in paragraph (b)(3)(i) of this section, or the results of the performance test as described in paragraph (b)(3)(ii) or (iii) of this section. The provisions of this paragraph (b)(3) apply to owners or operators using a halogen reduction device following a combustion device to comply with § 65.83(b)(1).

(i) *Design evaluation.* The design evaluation shall include documentation demonstrating that the halogen reduction device being used achieves the required control efficiency during the reasonably expected maximum transfer loading rate. This documentation is to include a description of the gas stream that enters the halogen reduction device, including flow and regulated material content. The efficiency determination is to include consideration of all vapors, gases, and liquids, other than fuels, received by the halogen reduction device. This documentation shall be submitted with the Initial Compliance Status Report as specified in § 65.165(b).

(ii) *Performance test.* A performance test is acceptable to demonstrate compliance with § 65.83(b)(1) for low-throughput transfer racks. The owner or operator is not required to prepare a

## Environmental Protection Agency

## § 65.147

design evaluation for the halogen reduction device as described in paragraph (b)(3)(i) of this section if a performance test will be performed that meets the following criteria:

(A) The performance test demonstrates that the halogen reduction device achieves greater than or equal to the required control efficiency specified in § 65.83(b)(1) for transfer racks; and

(B) The performance test meets the applicable performance test requirements of §§ 65.157 and 65.158, and the results are submitted as part of the Initial Compliance Status Report as specified in § 65.165(b).

(iii) If the halogen reduction device used to comply with § 65.83(b)(1) for low-throughput transfer racks, is also used to comply with § 65.63(b)(1) for process vents, or § 65.83(b)(1) for high-throughput transfer racks, a performance test required by § 65.154(b) is acceptable to demonstrate compliance with § 65.83(b)(1) for low-throughput transfer racks. The owner or operator is not required to prepare a design evaluation for the halogen reduction device as described in paragraph (b)(3)(i) of this section, if a performance test will be performed which meets the following criteria:

(A) The performance test demonstrates that the halogen reduction device achieves greater than or equal to the required control efficiency specified in § 65.83(b)(1) for transfer racks; and

(B) The performance test is submitted as part of the Initial Compliance Status Report as specified in § 65.165(b).

(c) *Nonflare control device monitoring requirements.* (1) Unless previously established under an applicable standard prior to the implementation date of this part as specified in § 65.1(f), the owner or operator shall submit with the Initial Compliance Status Report a monitoring plan containing the information specified in § 65.165(b) to identify the parameters that will be monitored to assure proper operation of the control device. The owner or operator of a halogenated low-throughput transfer rack vent stream routed to a combustion device and then to a halogen reduction device to meet the specifica-

tions of § 65.83(b)(1) shall submit with the Initial Compliance Status Report a monitoring plan containing the information specified in § 65.165(b) to identify the parameters that will be monitored to assure proper operation of the halogen reduction device.

(2) The owner or operator shall monitor the parameters specified in the Initial Compliance Status Report or in the operating permit. Records shall be generated as specified in § 65.163(b)(1).

### § 65.146 Nonflare control devices used for equipment leaks only.

(a) *Equipment and operating requirements.* (1) Owners or operators using a nonflare control device to meet the applicable requirements in § 65.115(b) shall meet the requirements of this section.

(2) Control devices used to comply with the provisions of this subpart shall be operated at all times when emissions are vented to them.

(b) *Performance test requirements.* A performance test is not required for any nonflare control device used only to control emissions from equipment leaks.

(c) *Monitoring requirements.* Owners or operators of control devices that are used only to comply with the provisions of § 65.115(b) shall monitor these control devices to ensure that they are operated and maintained in conformance with their design. The owner or operator shall maintain the records as specified in § 65.163(d).

### § 65.147 Flares.

(a) *Flare equipment and operating requirements.* Flares subject to this subpart shall meet the performance requirements of paragraphs (a)(1) through (7) of this section.

(1) Flares shall be operated at all times when emissions are vented to them.

(2) Flares shall be designed for and operated with no visible emissions as determined by the methods specified in paragraph (b)(3)(i) of this section, except for periods not to exceed a total of 5 minutes during any 2 consecutive hours.

(3) Flares shall be operated with a flare flame or at least one pilot flame present at all times, as determined by