

Environmental Protection Agency

§ 63.1011

(6) *Equipment obstructions.* Any agitator seal that is obstructed by equipment or piping that prevents access to the agitator by a monitor probe is exempt from the monitoring requirements of paragraph (b) of this section.

(7) *Unsafe-to-monitor agitator seals.* Any agitator seal that is designated, as described in § 63.1003(c)(1), as an unsafe-to-monitor agitator seal is exempt from the requirements of paragraph (b) of this section and the owner or operator of the agitator seal monitors the agitator seal according to the written plan specified in § 63.1003(c)(5).

§ 63.1010 Pumps, valves, connectors, and agitators in heavy liquid service; pressure relief devices in liquid service; and instrumentation systems standards.

(a) *Compliance schedule.* The owner or operator shall comply with this section no later than the compliance dates specified in the referencing subpart.

(b) *Leak detection.* (1) *Monitoring method.* Unless otherwise specified in § 63.1002(b), or § 63.1016, the owner or operator shall comply with paragraphs (b)(1) and (b)(2) of this section. Pumps, valves, connectors, and agitators in heavy liquid service; pressure relief devices in light liquid or heavy liquid service; and instrumentation systems shall be monitored within 5 calendar days by the method specified in § 63.1004(b) if evidence of a potential leak to the atmosphere is found by visual, audible, olfactory, or any other detection method. If such a potential leak is repaired as required in paragraph (c) of this section, it is not necessary to monitor the system for leaks by the method specified in § 63.1004(b).

(2) *Instrument reading that defines a leak.* For systems monitored by the method specified in § 63.1004(b), if an instrument reading of 10,000 parts per million or greater is measured, a leak is detected. If a leak is detected, it shall be identified pursuant to § 63.1004(e) and repaired pursuant to § 63.1005.

(c) *Leak repair.* If a leak is determined pursuant to this section, then the leak shall be repaired using the procedures in § 63.1005, as applicable. For equipment identified in paragraph (b) of this section that is not monitored by the method specified in

§ 63.1004(b), repaired shall mean that the visual, audible, olfactory, or other indications of a leak to the atmosphere have been eliminated; that no bubbles are observed at potential leak sites during a leak check using soap solution; or that the system will hold a test pressure.

§ 63.1011 Pressure relief devices in gas and vapor service standards.

(a) *Compliance schedule.* The owner or operator shall comply with this section no later than the compliance dates specified in the referencing subpart.

(b) *Compliance standard.* Except during pressure releases as provided for in paragraph (c) of this section, each pressure relief device in gas or vapor service shall be operated with an instrument reading of less than 500 parts per million as measured by the method specified in § 63.1004(c).

(c) *Pressure relief requirements.* (1) After each pressure release, the pressure relief device shall be returned to a condition indicated by an instrument reading of less than 500 parts per million, as soon as practical, but no later than 5 calendar days after each pressure release, except as provided in paragraph (d) of this section.

(2) The pressure relief device shall be monitored no later than five calendar days after the pressure release and being returned to regulated material service to confirm the condition indicated by an instrument reading of less than 500 parts per million, as measured by the method specified in § 63.1004(c).

(3) The owner or operator shall record the dates and results of the monitoring required by paragraph (c)(2) of this section following a pressure release including maximum instrument reading measured during the monitoring and the background level measured if the instrument reading is adjusted for background.

(d) *Pressure relief devices routed to a process or fuel gas system or equipped with a closed vent system and control device.* Any pressure relief device that is routed to a process or fuel gas system or equipped with a closed vent system that captures and transports leakage from the pressure relief device to a

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control device meeting the requirements of § 63.1015 is exempt from the requirements of paragraphs (b) and (c) of this section.

(e) *Rupture disk exemption.* Any pressure relief device that is equipped with a rupture disk upstream of the pressure relief device is exempt from the requirements of paragraphs (b) and (c) of this section provided the owner or operator installs a replacement rupture disk upstream of the pressure relief device as soon as practical after each pressure release, but no later than 5 calendar days after each pressure release, except as provided in § 63.1005(d).

§ 63.1012 Compressor standards.

(a) *Compliance schedule.* The owner or operator shall comply with this section no later than the compliance dates specified in the referencing subpart.

(b) *Seal system standard.* Each compressor shall be equipped with a seal system that includes a barrier fluid system and that prevents leakage of process fluid to the atmosphere, except as provided in § 63.1002(b) and paragraphs (e) and (f) of this section. Each compressor seal system shall meet the requirements specified in paragraphs (b)(1), (b)(2), or (b)(3) of this section.

(1) Operated with the barrier fluid at a pressure that is greater than the compressor stuffing box pressure at all times (except during periods of startup, shutdown, or malfunction); or

(2) Equipped with a barrier fluid system degassing reservoir that is routed to a process or fuel gas system or connected by a closed-vent system to a control device that meets the requirements of § 63.1015; or

(3) Equipped with a closed-loop system that purges the barrier fluid directly into a process stream.

(c) *Barrier fluid system.* The barrier fluid shall not be in light liquid service. Each barrier fluid system shall be equipped with a sensor that will detect failure of the seal system, barrier fluid system, or both. Each sensor shall be observed daily or shall be equipped with an alarm unless the compressor is located within the boundary of an unmanned plant site.

(d) *Failure criterion and leak detection.*

(1) The owner or operator shall determine, based on design considerations

and operating experience, a criterion that indicates failure of the seal system, the barrier fluid system, or both. If the sensor indicates failure of the seal system, the barrier fluid system, or both based on the criterion, a leak is detected and shall be repaired pursuant to § 63.1005, as applicable.

(2) The owner or operator shall keep records of the design criteria and an explanation of the design criteria; and any changes to these criteria and the reasons for the changes.

(e) *Routed to a process or fuel gas system or equipped with a closed vent system and control device.* A compressor is exempt from the requirements of paragraphs (b) through (d) of this section if it is equipped with a system to capture and transport leakage from the compressor drive shaft seal to a process or a fuel gas system or to a closed vent system that captures and transports leakage from the compressor to a control device meeting the requirements of § 63.1015.

(f) *Alternative compressor standard.* (1) Any compressor that is designated as described in § 63.1003(e) as operating with no detectable emissions shall operate at all times with an instrument reading of less than 500 parts per million. A compressor so designated is exempt from the requirements of paragraphs (b) through (d) of this section if the compressor is demonstrated initially upon designation, annually, and at other times requested by the Administrator to be operating with an instrument reading of less than 500 parts per million as measured by the method specified in § 63.1004(c). A compressor may not be designated or operated having an instrument reading of less than 500 parts per million as described in § 63.1003(e) if the compressor has a maximum instrument reading greater than 500 parts per million.

(2) The owner or operator shall record the dates and results of each compliance test including the background level measured and the maximum instrument reading measured during each compliance test.

(g) *Reciprocating compressor exemption.* Any existing reciprocating compressor in a process unit or affected facility that becomes an affected facility under