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from the seal or seals to a process or fuel gas system or to a control device that complies with the requirements of §61.242-11, it is exempt from the requirements of paragraphs (a) through (e) of this section.

- (g) Any pump that is designated, as described in $\S61.246(f)(1)$, as an unsafeto-monitor pump is exempt from the monitoring and inspection requirements of paragraphs (a) and (d)(4) through (6) of this section if:
- (1) The owner or operator of the pump demonstrates that the pump is unsafe-to-monitor because monitoring personnel would be exposed to an immediate danger as a consequence of complying with paragraph (a) of this section; and
- (2) The owner or operator of the pump has a written plan that requires monitoring of the pump as frequently as practicable during safe-to-monitor times but not more frequently than the periodic monitoring schedule otherwise applicable, and repair of the equipment according to the procedures in paragraph (c) of this section if a leak is detected.
- (h) Any pump that is located within the boundary of an unmanned plant site is exempt from the weekly visual inspection requirement of paragraphs (a)(2) and (d)(4) of this section, and the daily requirements of paragraph (d)(5) of this section, provided that each pump is visually inspected as often as practicable and at least monthly.

[49 FR 23513, June 6, 1984, as amended at 49 FR 38946, Oct. 2, 1984; 55 FR 28349, July 10, 1990; 65 FR 78281, Dec. 14, 2000]

§ 61.242-3 Standards: Compressors.

- (a) Each compressor shall be equipped with a seal system that includes a barrier fluid system and that prevents leakage of process fluid to atmosphere, except as provided in §61.242-1(c) and paragraphs (h) and (i) of this section.
- (b) Each compressor seal system as required in paragraph (a) shall be:
- (1) Operated with the barrier fluid at a pressure that is greater than the compressor stuffing box pressure; 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 complies with the requirements of §61.242-11; or

- (3) Equipped with a system that purges the barrier fluid into a process stream with zero VHAP emissions to atmosphere.
- (c) The barrier fluid shall not be in VHAP service and, if the compressor is covered by standards under 40 CFR part 60, shall not be in VOC service.
- (d) Each barrier fluid system as described in paragraphs (a)–(c) of this section shall be equipped with a sensor that will detect failure of the seal system, barrier fluid system, or both.
- (e)(1) Each sensor as required in paragraph (d) of this section shall be checked daily or shall be equipped with an audible alarm unless the compressor is located within the boundary of an unmanned plant site.
- (2) 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.
- (f) If the sensor indicates failure of the seal system, the barrier fluid system, or both based on the criterion determined under paragraph (e)(2) of this section, a leak is detected.
- (g)(1) When a leak is detected, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in §61.242–10.
- (2) A first attempt at repair shall be made no later than 5 calendar days after eack leak is detected.
- (h) A compressor is exempt from the requirements of paragraphs (a) and (b) of this section if it is equipped with a closed-vent system to capture and transport leakage from the compressor drive shaft back to a process or fuel gas system or to a control device that complies with the requirements of §61.242–11, except as provided in paragraph (i) of this section.
- (i) Any Compressor that is designated, as described in §61.246(e)(2), for no detectable emission as indicated by an instrument reading of less than 500 ppm above background is exempt from the requirements of paragraphs (a)–(h) if the compressor:
- (1) Is demonstrated to be operating with no detectable emissions, as indicated by an instrument reading of less

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than 500 ppm above background, as measured by the method specified in §61.245(c); and

(2) Is tested for compliance with paragraph (i)(1) initially upon designation, annually, and at other times requested by the Administrator.

[49 FR 23513, June 6, 1984; 49 FR 38946, Oct. 2, 1984, as amended at 65 FR 78281, Dec. 14, 2000]

§61.242-4 Standards: Pressure relief devices in gas/vapor service.

- (a) Except during pressure releases, each pressure relief device in gas/vapor service shall be operated with no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, as measured by the method specified in §61.245(c).
- (b)(1) After each pressure release, the pressure relief device shall be returned to a condition of no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, as soon as practicable, but no later than 5 calendar days after each pressure release, except as provided in §61.242–10.
- (2) No later than 5 calendar days after the pressure release, the pressure relief device shall be monitored to confirm the condition of no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, as measured by the method specified in §61.245(c).
- (c) Any pressure relief device that is routed to a process or fuel gas system or equipped with a closed-vent system capable of capturing and transporting leakage from the pressure relief device to a control device as described in §61.242–11 is exempt from the requirements of paragraphs (a) and (b) of this section.
- (d)(1) Any pressure relief device that is equipped with a rupture disk upstream of the pressure relief device is exempt from the requirements of paragraphs (a) and (b) of this section, provided the owner or operator complies with the requirements in paragraph (d)(2) of this section.
- (2) After each pressure release, a new rupture disk shall be installed upstream of the pressure relief device as soon as practicable, but no later than 5

calendar days after each pressure release, except as provided in §61.242–10.

[49 FR 23513, June 6, 1984; 49 FR 38946, Oct. 2, 1984, as amended at 65 FR 78281, Dec. 14, 2000]

§61.242-5 Standards: Sampling connecting systems.

- (a) Each sampling connection system shall be equipped with a closed-purge, closed-loop, or closed vent system, except as provided in §61.242-1(c). Gases displaced during filling of the sample container are not required to be collected or captured.
- (b) Each closed-purge, closed-loop, or closed vent system as required in paragraph (a) of this section shall comply with the requirements specified in paragraphs (b)(1) through (4) of this section:
- (1) Return the purged process fluid directly to the process line; or
- (2) Collect and recycle the purged process fluid; or
- (3) Be designed and operated to capture and transport all the purged process fluid to a control device that complies with the requirements of §61.242–11: or
- (4) Collect, store, and transport the purged process fluid to any of the following systems or facilities:
- (i) A waste management unit as defined in 40 CFR 63.111 if the waste management unit is subject to and operated in compliance with the provisions of 40 CFR part 63, subpart G, applicable to Group 1 wastewater streams; or
- (ii) A treatment, storage, or disposal facility subject to regulation under 40 CFR part 262, 264, 265, or 266; or
- (iii) A facility permitted, licensed, or registered by a State to manage municipal or industrial solid waste, if the process fluids are not hazardous waste as defined in 40 CFR part 261.
- (c) In-situ sampling systems and sampling systems without purges are exempt from the requirements of paragraphs (a) and (b) of this section.

[65 FR 78281, Dec. 14, 2000]

§ 61.242-6 Standards: Open-ended valves or lines.

(a)(1) Each open-ended valve or line shall be equipped with a cap, blind flange, plug, or a second valve, except as provided in §61.242-1(c).