

§ 65.109

40 CFR Ch. I (7-1-03 Edition)

- (A) Buried;
  - (B) Insulated in a manner that prevents access to the connector by a monitor probe;
  - (C) Obstructed by equipment or piping that prevents access to the connector by a monitor probe;
  - (D) Unable to be reached from a wheeled scissor-lift or hydraulic-type scaffold that would allow access to connectors up to 7.6 meters (25 feet) above the ground;
  - (E) Inaccessible because it would require elevating the monitoring personnel more than 2 meters (7 feet) above a permanent support surface or would require the erection of scaffold;
  - (F) Not able to be accessed at any time in a safe manner to perform monitoring. Unsafe access includes, but is not limited to, the use of a wheeled scissor-lift on unstable or uneven terrain, the use of a motorized man-lift basket in areas where an ignition potential exists, or access would require near proximity to hazards such as electrical lines or would risk damage to equipment.
    - (ii) If any inaccessible, ceramic, or ceramic-lined connector is observed by visual, audible, olfactory, or other means to be leaking, the visual, audible, olfactory, or other indications of a leak to the atmosphere shall be eliminated as soon as practical.
- (3) *Connectors referenced from 40 CFR part 60, subpart VV or 40 CFR part 61, subpart V.* For sources referenced to this part from 40 CFR part 61, subpart VV, or from 40 CFR part 61, subpart V, connectors are exempt from the requirements of paragraphs (a) through (d) of this section and the owner or operator shall comply with the following paragraphs:
- (i) Connectors shall be monitored within 5 days by the method specified in § 65.104(b) and (c) if evidence of a potential leak is found by visual, audible, olfactory, or any other detection method.
  - (ii) If an instrument reading of 500 parts per million or greater is measured, a leak is detected.
  - (iii) When a leak is detected, it shall be repaired using the procedures in § 65.105, as applicable.

**§ 65.109 Standards: Agitators in gas/vapor service and in light liquid service.**

- (a) *Compliance schedule.* The owner or operator shall comply with this section no later than the implementation date specified in § 65.1(f).
- (b) *Leak detection.* (1) *Monitoring method.* Each agitator seal shall be monitored monthly to detect leaks by the methods specified in § 65.104(b) and (c), except as provided in § 65.102(b) or paragraph (e) of this section.
  - (2) *Instrument reading that defines a leak.* If an instrument reading of 10,000 parts per million or greater is measured, a leak is detected.
  - (3) *Visual inspection.* Each agitator seal shall be checked by visual inspection each calendar week for indications of liquids dripping from the agitator seal. The owner or operator shall document that the inspection was conducted and the date of the inspection. If there are indications of liquids dripping from the agitator seal, the owner or operator shall comply with either of the following procedures prior to the next required inspection:
    - (i) The owner or operator shall monitor the agitator seal as specified in § 65.104(b) and (c) to determine if there is a leak of regulated material. If an instrument reading of 10,000 parts per million or greater is measured, a leak is detected, and it shall be repaired according to paragraph (d) of this section.
    - (ii) The owner or operator shall eliminate the indications of liquids dripping from the agitator seal.
- (c) [Reserved]
- (d) *Leak repair.* If a leak is detected, then the leak shall be repaired using the procedures in § 65.105(a).
- (e) *Special provisions for agitators.* (1) *Dual mechanical seal.* Each agitator equipped with a dual mechanical seal system that includes a barrier fluid system is exempt from the requirements of paragraph (b) of this section provided the requirements specified in paragraphs (e)(1)(i) through (vi) of this section are met.
  - (i) Each dual mechanical seal system shall meet any one of the following requirements:
    - (A) Operated with the barrier fluid at a pressure that is at all times (except

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during periods of startup, shutdown, or malfunction) greater than the agitator stuffing box pressure; or

(B) Equipped with a barrier fluid 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 §65.115; or

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

(ii) The barrier fluid is not in light liquid service.

(iii) Each barrier fluid system is equipped with a sensor that will detect failure of the seal system, the barrier fluid system, or both.

(iv) Each agitator seal is checked by visual inspection each calendar week for indications of liquids dripping from the agitator seal. If there are indications of liquids dripping from the agitator seal at the time of the weekly inspection, the owner or operator shall follow either of the following procedures prior to the next required inspection:

(A) The owner or operator shall monitor the agitator seal as specified in §65.104(b) and (c) to determine the presence of regulated material in the barrier fluid. If an instrument reading of 10,000 parts per million or greater is measured, a leak is detected and it shall be repaired using the procedures in §65.105; or

(B) The owner or operator shall eliminate the visual indications of liquids dripping.

(v) Each sensor as described in paragraph (e)(1)(iii) of this section is observed daily or is equipped with an alarm unless the agitator seal is located within the boundary of an unmanned plant site.

(vi) The owner or operator of each dual mechanical seal system shall meet the following requirements:

(A) The owner or operator shall determine based on design considerations and operating experience criteria that indicates failure of the seal system, the barrier fluid system, or both and that are applicable to the presence and frequency of drips. If indications of liquids dripping from the agitator seal exceed the criteria, or if based on the criteria the sensor indicates failure of the

seal system, the barrier fluid system, or both, a leak is detected and shall be repaired pursuant to §65.105, as applicable.

(B) 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.

(2) *No external shaft.* Any agitator that is designed with no externally actuated shaft penetrating the agitator housing is exempt from paragraph (b) of this section.

(3) *Routed to a process or fuel gas system or equipped with a closed vent system.* Any agitator that is routed to a process or fuel gas system or equipped with a closed vent system that captures and transports leakage from the agitator to a control device meeting the requirements of §65.115 is exempt from the requirements of paragraph (b) of this section.

(4) *Unmanned plant site.* Any agitator that is located within the boundary of an unmanned plant site is exempt from the weekly visual inspection requirement of paragraphs (b)(3) and (e)(1)(iv) of this section, and the daily requirements of paragraph (e)(1)(v) of this section provided that each agitator is visually inspected as often as practical and at least monthly.

(5) *Difficult-to-monitor agitator seals.* Any agitator seal that is designated as described in §65.103(c)(2) as a difficult-to-monitor agitator seal is exempt from the requirements of paragraph (b) of this section and the owner or operator shall monitor the agitator seal according to the written plan specified in §65.103(c)(4).

(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 §65.103(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 §65.103(c)(4).