

Environmental Protection Agency

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weeks instead of monthly or quarterly), following the performance criteria of section 3.1.2(a) of Method 21 of appendix A of 40 CFR part 60 instead of paragraph (b)(2) of this section, or monitoring using a different leak definition if the data would indicate the presence or absence of a leak at the concentration specified in this subpart. Failure to use a calibrated instrument is not considered a minor departure.

(c) *Instrument monitoring readings and background adjustments.* The owner or operator may elect to adjust or not to adjust the instrument readings for background. If an owner or operator elects not to adjust instrument readings for background, the owner or operator shall monitor the equipment according to the procedures specified in paragraphs (b)(1) through (5) of this section. In such cases, all instrument readings shall be compared directly to the applicable leak definition for the monitored equipment to determine whether there is a leak or to determine compliance with § 65.111(b) (pressure relief devices) or § 65.112(f) (alternative compressor standard). If an owner or operator elects to adjust instrument readings for background, the owner or operator shall monitor the equipment according to the following procedures:

(1) The requirements of paragraphs (b)(1) through (5) of this section shall apply.

(2) The background level shall be determined using the procedures in Method 21 of appendix A of 40 CFR part 60.

(3) The instrument probe shall be traversed around all potential leak interfaces as close to the interface as possible as described in Method 21 of appendix A of 40 CFR part 60.

(4) The arithmetic difference between the maximum concentration indicated by the instrument and the background level shall be compared to the applicable leak definition for the monitored equipment to determine whether there is a leak or to determine compliance with § 65.111(b) (pressure relief devices) or § 65.112(f) (alternative compressor standard).

(d) *Sensory monitoring methods.* Sensory monitoring consists of visual, audible, olfactory, or any other detection method used to determine a potential leak to the atmosphere.

(e) *Leaking equipment identification and records.* (1) When each leak is detected, a weatherproof and readily visible identification shall be attached to the leaking equipment.

(2) When each leak is detected, the information specified in paragraphs (e)(2)(i) and (ii) of this section shall be recorded and kept pursuant to § 65.4(a), except the information for valves complying with the 2-year monitoring period allowed under § 65.106(b)(3)(v), and connectors complying with the 8-year monitoring period allowed under § 65.108(b)(3)(iii) shall be kept 5 years beyond the date of the last use of the information to set a monitoring period.

(i) The instrument, the equipment identification, and the instrument operator's name, initials, or identification number if a leak is detected or confirmed by instrument monitoring.

(ii) The date the leak was detected.

§ 65.105 Leak repair.

(a) *Leak repair schedule.* The owner or operator shall repair each leak detected as soon as practical but not later than 15 calendar days after it is detected except as provided in paragraph (d) or (e) of this section. A first attempt at repair as defined in subpart A of this part shall be made no later than 5 calendar days after the leak is detected. First attempt at repair for pumps includes, but is not limited to, tightening the packing gland nuts and/or ensuring that the seal flush is operating at design pressure and temperature. First attempt at repair for valves includes, but is not limited to, tightening the bonnet bolts, and/or replacing the bonnet bolts, and/or tightening the packing gland nuts, and/or injecting lubricant into the lubricated packing.

(b) [Reserved]

(c) *Leak identification removal.* (1) *Valves and connectors.* The leak identification on a valve in gas/vapor or light liquid service may be removed after it has been monitored as specified in § 65.106(d)(2) and no leak has been detected during that monitoring. The leak identification on a connector in gas/vapor or light liquid service may be removed after it has been monitored as specified in § 65.108(b)(3)(iv) and no leak

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has been detected during that monitoring.

(2) *Other equipment.* The identification that has been placed pursuant to § 65.104(e)(1) on equipment determined to have a leak, except for a valve or for a connector that is subject to the provisions of § 65.108(b)(3)(iv), may be removed after it is repaired.

(d) *Delay of repair.* Delay of repair is allowed for any of the conditions specified in paragraphs (d)(1) through (5) of this section. The owner or operator shall maintain a record of the facts that explain any delay of repairs and, where appropriate, why repair within 15 days was technically infeasible without a process unit shutdown.

(1) Delay of repair of equipment for which leaks have been detected is allowed if repair within 15 days after a leak is detected is technically infeasible without a process unit shutdown. Repair of this equipment shall occur as soon as practical, but no later than the end of the next process unit shutdown, except as provided in paragraph (d)(5) of this section.

(2) 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 regulated material service.

(3) Delay of repair for valves, connectors, and agitators is also allowed if the following provisions are met:

(i) The owner or operator determines that emissions of purged material resulting from immediate repair would be greater than the fugitive emissions likely to result from delay of repair; and

(ii) When repair procedures are effected, the purged material is collected and routed to a process or fuel gas system or is collected and destroyed or recovered in a control device complying with § 65.115.

(4) Delay of repair for pumps is also allowed if the provisions of paragraphs (d)(4)(i) and (ii) of this section are met.

(i) Repair requires replacing the existing seal design with a new system that the owner or operator has determined under the provisions of § 65.116(d) will provide better performance or one of the following specifications are met:

(A) A dual mechanical seal system that meets the requirements of § 65.107(e)(1) will be installed;

(B) A pump that meets the requirements of § 65.107(e)(2) will be installed; or

(C) A system that routes emissions to a process or a fuel gas system or a closed vent system and control device that meets the requirements of § 65.107(e)(3) will be installed.

(ii) Repair is completed as soon as practical but not later than 6 months after the leak was detected.

(5) Delay of repair beyond a process unit shutdown will be allowed for a valve if valve assembly replacement is necessary during the process unit shutdown, and valve assembly supplies have been depleted, and valve assembly supplies had been sufficiently stocked before the supplies were depleted. Delay of repair beyond the second process unit shutdown will not be allowed unless the third process unit shutdown occurs sooner than 6 months after the first process unit shutdown.

(e) *Unsafe-to-repair: Connectors.* Any connector that is designated as described in § 65.103(d) as an unsafe-to-repair connector is exempt from the requirements of § 65.108(d) and paragraph (a) of this section if the provisions of § 65.103(d) are met.

(f) *Leak repair records.* For each leak detected, the information specified in paragraphs (f)(1) through (5) of this section shall be recorded and kept pursuant to § 65.4(a).

(1) The date of first attempt to repair the leak.

(2) The date of successful repair of the leak.

(3) Maximum instrument reading measured by Method 21 of appendix A of 40 CFR part 60 at the time the leak is successfully repaired or determined to be nonreparable.

(4) "Repair delayed" and the reason for the delay if a leak is not repaired within 15 calendar days after discovery of the leak as specified in the paragraphs (f)(4)(i) and (ii) of this section.

(i) The owner or operator may develop a written procedure that identifies the conditions that justify a delay of repair. The written procedures may be included as part of the startup/shutdown/malfunction plan required by

§ 65.6 for the source or may be part of a separate document that is maintained at the plant site. In such cases, reasons for delay of repair may be documented by citing the relevant sections of the written procedure.

(ii) If delay of repair was caused by depletion of stocked parts, there must be documentation that the spare parts were sufficiently stocked onsite before depletion and the reason for depletion.

(5) Dates of process unit shutdowns that occur while the equipment is unrepaired.

§ 65.106 Standards: Valves in gas/vapor service and in light liquid service.

(a) *Compliance schedule.* (1) The owner or operator shall comply with this section no later than the implementation date specified in § 65.1(f).

(2) The use of monitoring data generated before the regulated source became subject to the referencing subpart to qualify initially for less frequent monitoring is governed by the provisions of § 65.104(b)(6).

(b) *Leak detection.* Unless otherwise specified in § 65.102(b) or paragraph (e) of this section, the owner or operator shall monitor all valves at the intervals specified in paragraphs (b)(3) and/or (b)(4) of this section and shall comply with all other provisions of this section.

(1) *Monitoring method.* The valves shall be monitored to detect leaks by the method specified in § 65.104(b) and (c).

(2) *Instrument reading that defines a leak.* The instrument reading that defines a leak is 500 parts per million or greater.

(3) *Monitoring frequency.* The owner or operator shall monitor valves for leaks at the intervals specified in paragraphs (b)(3)(i) through (v) of this section and shall keep the record specified in paragraph (b)(3)(vi) of this section.

(i) If at least the greater of two valves or 2 percent of the valves in a process unit leak, as calculated according to paragraph (c) of this section, the owner or operator shall monitor each valve once per month.

(ii) At process units with less than the greater of two leaking valves or 2 percent leaking valves, the owner or operator shall monitor each valve once

each quarter except as provided in paragraphs (b)(3)(iii) through (v) of this section. Monitoring data generated before the regulated source became subject to the referencing subpart and meeting the criteria of either § 65.104(b)(1) through (5) or § 65.104(b)(6) may be used to qualify initially for less frequent monitoring under paragraphs (b)(3)(iii) through (v) of this section.

(iii) At process units with less than 1 percent leaking valves, the owner or operator may elect to monitor each valve once every 2 quarters.

(iv) At process units with less than 0.5 percent leaking valves, the owner or operator may elect to monitor each valve once every 4 quarters.

(v) At process units with less than 0.25 percent leaking valves, the owner or operator may elect to monitor each valve once every 2 years.

(vi) The owner or operator shall keep a record of the monitoring schedule for each process unit.

(4) *Valve subgrouping.* For a process unit or a group of process units to which this subpart applies, an owner or operator may choose to subdivide the valves in the applicable process unit or group of process units and apply the provisions of paragraph (b)(3) of this section to each subgroup. If the owner or operator elects to subdivide the valves in the applicable process unit or group of process units, then the provisions of paragraphs (b)(4)(i) through (viii) of this section apply.

(i) The overall performance of total valves in the applicable process unit or group of process units to be subdivided shall be less than 2 percent leaking valves, as detected according to paragraphs (b)(1) and (2) of this section and as calculated according to paragraphs (c)(1)(ii) and (c)(2) of this section.

(ii) The initial assignment or subsequent reassignment of valves to subgroups shall be governed by the following provisions:

(A) The owner or operator shall determine which valves are assigned to each subgroup. Valves with less than 1 year of monitoring data or valves not monitored within the last 12 months must be placed initially into the most frequently monitored subgroup until at least 1 year of monitoring data have been obtained.