

WAC 173-360A-0615 Release detection methods for piping. Owners and operators must monitor underground piping for leaks using the methods, or combination of methods, of release detection specified in this section.

(1) **Piping requiring secondary containment.** Underground piping requiring secondary containment under WAC 173-360A-0310 (5) (a) must be monitored for leaks as follows.

(a) **Pressurized piping.** Underground piping conveying regulated substances under pressure must be equipped with an automatic line leak detector (WAC 173-360A-0640) and monitored for leaks at least every thirty days using interstitial monitoring (WAC 173-360A-0655).

(b) **Suction piping.** Underground piping conveying regulated substances under suction, except as provided under WAC 173-360A-0600 (1)(b), must be monitored for leaks at least every thirty days using interstitial monitoring (WAC 173-360A-0655).

(2) **Piping not requiring secondary containment.** Except as provided for previously deferred UST systems under subsection (3) of this section, underground piping not requiring secondary containment under WAC 173-360A-0310 (5) (a) must be monitored for leaks as follows.

(a) **Pressurized piping.** Underground piping conveying regulated substances under pressure must be:

(i) Equipped with an automatic line leak detector (WAC 173-360A-0640); and

(ii) Monitored for leaks at least annually using line tightness testing (WAC 173-360A-0650) or every thirty days using one of the following methods, or combination of methods, of release detection:

(A) Monthly automatic electronic line leak detection (WAC 173-360A-0645);

(B) Interstitial monitoring (WAC 173-360A-0655). This method may be used only if the piping is secondarily contained and meets the performance standards in WAC 173-360A-0310 (5) (c);

(C) Vapor monitoring (WAC 173-360A-0660);

(D) Groundwater monitoring (WAC 173-360A-0665);

(E) Statistical inventory reconciliation (WAC 173-360A-0670); or

(F) Other release detection methods (WAC 173-360A-0675).

(b) **Suction piping.** Underground piping conveying regulated substances under suction, except as provided under WAC 173-360A-0600 (1)(b), must be monitored for leaks at least every three years using line tightness testing (WAC 173-360A-0650) or at least every thirty days using one of the following methods of release detection:

(i) Interstitial monitoring (WAC 173-360A-0655). This method may be used only if the piping is secondarily contained and meets the performance standards in WAC 173-360A-0310 (5) (c);

(ii) Vapor monitoring (WAC 173-360A-0660);

(iii) Groundwater monitoring (WAC 173-360A-0665);

(iv) Statistical inventory reconciliation (WAC 173-360A-0670); or

(v) Other release detection methods (WAC 173-360A-0675).

(3) **Additional methods for certain previously deferred UST systems.** Underground piping not requiring secondary containment under WAC 173-360A-0310 (5) (a) associated with field-constructed tanks with a capacity greater than fifty thousand gallons or airport hydrant systems must be monitored for leaks in accordance with subsection (2) of this section or using one of the following methods, or combination of methods, of release detection:

(a) Line tightness testing (WAC 173-360A-0650) performed semiannually or annually, except the method must be able to detect the leak rate specified in Table 0615-1. Piping segment volumes greater than or

equal to one hundred thousand gallons not capable of meeting the maximum 3.0 gallon per hour leak rate for the semiannual test may be tested at a leak rate up to 6.0 gallons per hour according to the schedule in Table 0615-2;

**Table 0615-1: Maximum Leak Detection Rate per Test
Section Volume**

Test Section Volume (Gallons)	Semiannual Test - Leak Detection Rate Not To Exceed (Gallons Per Hour)	Annual Test - Leak Detection Rate Not To Exceed (Gallons Per Hour)
< 50,000	1.0	0.5
≥ 50,000 to < 75,000	1.5	0.75
≥ 75,000 to < 100,000	2.0	1.0
≥ 100,000	3.0	1.5

**Table 0615-2: Phase-In for Piping Segments ≥ 100,000
Gallons in Volume**

Test	Time Frame	Leak Detection Rate
First test	Not later than October 1, 2021	May use up to 6.0 gallons per hour leak rate
Second test	Between October 1, 2021, and October 1, 2024	May use up to 6.0 gallons per hour leak rate
Third test	Between October 1, 2024, and October 1, 2025	Must use 3.0 gallons per hour leak rate
Subsequent tests	After October 1, 2025	Begin using semiannual or annual line testing according to Table 0615-1

(b) Vapor monitoring (WAC 173-360A-0660) performed at least every two years, except the method must use a tracer compound and be able to detect a 0.1 gallon per hour leak rate;

(c) Combination of inventory control (WAC 173-360A-0620) performed at least every thirty days, except the method must be able to detect a leak of at least 0.5 percent of flow-through and be performed in accordance with Department of Defense Instruction 4140.25, Air Transport Association Airport Fuel Facility Operations and Maintenance Guidance Manual, or equivalent procedures, and either:

(i) Line tightness testing (WAC 173-360A-0650) performed at least every two years, except the method must be performed in accordance with (a) of this subsection using the leak rates for the semiannual test in Table 0615-1;

(ii) Vapor monitoring (WAC 173-360A-0660) performed at least every thirty days; or

(iii) Groundwater monitoring (WAC 173-360A-0665) performed at least every thirty days; or

(d) Other release detection methods (WAC 173-360A-0675), except owners and operators must demonstrate the method can detect a leak as effectively as any of the methods allowed in (a) through (c) of this subsection and the department must approve the use of the method. In comparing methods, the department will consider the size of release that can be detected and the frequency and reliability of detection.

[Statutory Authority: Chapter 90.76 RCW. WSR 18-15-083 (Order 16-02), § 173-360A-0615, filed 7/18/18, effective 10/1/18.]