



DEPARTMENT OF
ECOLOGY
State of Washington

**Underground Storage Tank Regulations
Chapter 173-360A WAC:
Parts 1 through 9**

Preliminary Draft for Stakeholder Review

July 10, 2017

For more information about the preliminary draft of the Underground Storage Tank rule:

Visit Ecology's Underground Storage Tank Rulemaking Public Involvement webpage at <http://www.ecy.wa.gov/programs/tcp/regs/wac173360/1602inv.html>.

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Comment period ends August 18, 2017:

Submit your comments on this preliminary draft rule by **August 18, 2017**, using Ecology's eComment system at <http://cs.ecology.commentinput.com/?id=Y74Ab>.

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Part 1: Purpose and Scope

Crosswalk of Sections

TOPIC	AMENDED RULE §	CURRENT RULE §	FEDERAL RULE §
Purpose and scope	Part 1	Parts 1 & 5	Subpart A
Purpose of chapter	100	100	--
Applicability of chapter	110	110	10, 11
Preemption of local programs	120	500	--
Local delegation of state program [DELETED] ¹	--	500	--
Approval of more stringent local requirements	130	510-530	--
Intergovernmental agreements	140	105	--
Definitions	150	120	12, 250, Subpart I
Severability	190	--	--

¹ Eliminated Ecology's authority to delegate state program responsibilities to local governments, consistent with the change in statutory authority (RCW 90.76.030 repealed in 1998).

WAC 173-360A-100 Purpose of chapter

This chapter is promulgated under the authority of chapter 90.76 RCW and establishes a state-wide underground storage tank program that is intended, at a minimum, to meet the legislature's intent to:

- (1) Address the serious threat to human health and the environment posed by leaking underground storage tanks containing petroleum and other regulated substances;
- (2) Meet the requirements for delegation of the federal underground storage tank program of the Resource Conservation and Recovery Act of 1976, as amended (42 U.S.C. Sec. 6901, et seq.);
- (3) Be consistent with and no less stringent than the requirements in the federal regulations and the Underground Storage Tank Compliance Act of 2005 (42 U.S.C. Sec. 15801 et seq., Energy Policy Act of 2005, P.L. 109-58, Title XV, subtitle B);² and
- (4) Allow for the establishment of local requirements more stringent than the state-wide requirements to protect environmentally sensitive areas.

² Incorporated changes to statement of purpose in RCW 90.76.005 and 90.76.020 to include requirement that state program be consistent with as no less stringent than requirements in the Underground Storage Tank Compliance Act of 2005.

WAC 173-360A-110 Applicability of chapter

The requirements of this chapter apply to all owners and operators of an UST system, except as otherwise provided in this section.

- (1) Exempt UST systems.** The following UST systems are exempt from all of the requirements of this chapter:
- (a) Any UST system holding hazardous wastes subject to Subtitle C of the Solid Waste Disposal Act (42 U.S.C. Sec. 6921 through 6939e), or a mixture of such hazardous waste and other regulated substances;
 - (b) Any wastewater treatment tank system that is part of a wastewater treatment facility regulated under section 307(b) or 402 of the Clean Water Act (33 U.S.C. Sec. 1317(b) or 1342);
 - (c) Any storage tank situated in an underground area (such as a basement, cellar, vault, mineworking, drift, shaft, or tunnel) upon or above the surface of the floor so that routine physical inspection of the exterior of the tank is possible;³
 - (d) Any UST system that stores heating oil solely for heating structures on the property where the system is located;^{4 5}
 - (e) Any farm or residential UST system with a capacity of one thousand one hundred gallons or less used for storing motor fuel for noncommercial purposes;
 - (f) Any UST system with a capacity of one hundred ten gallons or less;
 - (g) Any UST system that contains a de minimis concentration of regulated substances;⁶
 - (h) Any emergency spill or overflow containment UST system that is expeditiously emptied after use;
 - (i) Any equipment or machinery that contains regulated substances for operational purposes such as hydraulic lift tanks and electrical equipment tanks;

³ Incorporated definition of “underground area” into exemption where term used. This was the only use of the term in the rule. No change to the exemption is intended.

⁴ Changed heating oil exemption to limit it to UST systems storing heating oil solely for heating structures on the property where the system is located. The exemption no longer applies to UST systems storing heating oil for other purposes, such as for powering generators. UST systems that store heating oil solely for use by emergency power generators are regulated under the federal rule pursuant to §280.10(a). Also incorporated into the provision the existing definitions of “consumptive use” and “on the premises where stored.” This exemption was the only use of the terms in the rule.

⁵ Changed heating oil exemption by eliminating exception for UST systems storing in excess of 1,100 gallons. Such systems are currently subject to the release reporting provisions of the UST rule. The requirement was eliminated since such systems must also be reported under the MTCA cleanup regulations (WAC 173-340-300(2)).

⁶ To be consistent with §280.10(b)(5) of the federal rule, changed description of de minimis concentration exemption and eliminated definition of term “de minimis concentration” that confused “concentration” with “amount.”

- (j) Any flow-through process tank;
- (k) Any septic tank;
- (l) Any stormwater or wastewater collection system;
- (m) Any surface impoundment, pit, pond, or lagoon;
- (n) Any liquid traps or associated gathering lines directly related to oil or gas production and gathering operations; and
- (o) Any pipeline facility (including gathering lines):
 - (i) Which is regulated under 49 U.S.C. chapter 601; or
 - (ii) Which is an intrastate pipeline facility regulated under state laws as provided in 49 U.S.C. chapter 601, and which is determined by the Secretary of Transportation to be connected to a pipeline, or to be operated or intended to be capable of operating at pipeline pressure or as an integral part of a pipeline.⁷

(2) Partially exempt UST systems.

- (a) The following UST systems are partially exempt and subject only to the requirements of this chapter specified in (b) of this subsection:
 - (i) Any wastewater treatment tank system not regulated under section 307(b) or 402 of the Clean Water Act (33 U.S.C. Sec. 1317(b) or 1342);
 - (ii) Any UST system containing radioactive material that is regulated under the Atomic Energy Act of 1954 (42 U.S.C. Sec. 2011 et seq.);
 - (iii) Any UST system that is part of an emergency power generator system at a nuclear power generation facility licensed by the Nuclear Regulatory Commission and subject to Nuclear Regulatory Commission requirements regarding design and quality criteria, including but not limited to 10 C.F.R. Part 501,⁸ and
 - (iv) Any aboveground storage tanks associated with previously deferred UST systems.⁹

⁷ Consistent with changes to the definition of “underground storage tank” in §280.12 of the federal rule, updated description of pipeline facility exemption.

⁸ Consistent with §280.10(c)(4) of the federal rule, updated description of partial exemption for emergency power generator UST systems at nuclear power generation facilities.

⁹ Consistent with §280.10(c)(2) of the federal rule, eliminated partial exemption for airport hydrant fuel distribution systems and UST systems with field-constructed tanks, except for aboveground storage tanks associated with such systems. These systems are defined and referred to in the rule as “previously deferred UST systems.”

- (b) The partially exempt UST systems identified in (a) of this subsection are subject only to the requirements in the following sections or Parts of this chapter:¹⁰
- (i) WAC 173-360A-200 (licensing of UST systems);
 - (ii) WAC 173-360A-210 (fees for UST systems);
 - (iii) WAC 173-360A-220 (facility compliance tags);
 - (iv) WAC 173-360A-230(7) (notice upon sale or lease);
 - (v) WAC 173-360A-250 (compliance monitoring);
 - (vi) WAC 173-360A-270 (enforcement);
 - (vii) WAC 173-360A-280 (delivery prohibition);¹¹
 - (viii) WAC 173-360A-290 (civil penalties);
 - (ix) WAC 173-360A-300(1) through (7) (installation);
 - (x) WAC 173-360A-340 (performance standards for partially exempt UST systems);
 - (xi) WAC 173-360A-400(1) and WAC 173-360A-405(1) (transfer of regulated substances);
 - (xii) WAC 173-360A-410 (changes in regulated substances);
 - (xiii) WAC 173-360A-750 (reporting and cleanup of confirmed releases); and
 - (xiv) For aboveground storage tanks associated with previously deferred UST systems, Part 10 of this chapter (financial responsibility).¹²

(3) Previously deferred UST system compliance dates.¹³

- (a) Owners and operators of previously deferred UST systems installed on or before [effective date of rule] shall comply with the requirements of this chapter in accordance with the schedule in **Table 110-1**.

¹⁰ To be consistent with §280.10(c) of the federal rule, eliminated the applicability of the following requirements to partially exempt UST systems: notice of changes in release detection methods; notice of temporary closure and return to service; permanent closure; change-in-service; and site assessment upon closure.

¹¹ For partially exempt UST systems, clarified that delivery prohibition requirements are applicable.

¹² Consistent with §280.10(c) and §280.90(d) of the federal rule, added financial responsibility as an applicable requirement for aboveground storage tanks associated with previously deferred UST systems.

¹³ Established compliance dates for previously deferred UST systems in accord with §280.251(a) of the federal rule, except as otherwise noted.

Table 110-1: Previously deferred UST system compliance dates

Requirements	Compliance Date
Part 2 (administration and enforcement)	[effective date of rule] ¹⁴
Part 3 (installation and performance standards)	[within three years of effective date]
Part 4 (operation and maintenance)	[within three years of effective date]
Part 5 (operator training)	[within three years of effective date]
Part 6 (release detection)	[within three years of effective date]
Part 7 (release reporting, confirmation, and cleanup)	[effective date of rule]
Part 8 (closure)	[effective date of rule]
Part 9 (service providers)	[effective date of rule] ¹⁵
Part 10 (financial responsibility)	[effective date of rule] ¹⁶

- (b) Owners and operators of previously deferred UST systems installed after [effective date of rule] shall comply with the requirements of this chapter upon installation.

¹⁴ Specified compliance date for Part 2 (administration and enforcement) as effective date of rule. The federal rule specifies within 3 years of effective date. All previously deferred UST systems are already required to be licensed under state rule.

¹⁵ Specified compliance date for Part 9 (service providers) as effective date of rule. The federal rule does not include service provider requirements.

¹⁶ Specified compliance date for Part 10 (financial responsibility) as effective date of rule. The federal rule specifies within 3 years of effective date. All previously deferred UST systems are already licensed and have demonstrated financial responsibility.

WAC 173-360A-120 Preemption of local programs¹⁷

This chapter supersedes and preempts any state or local underground storage tank law, ordinance, or resolution governing any aspect of regulation covered by this chapter except:

- (1) Provisions of the international fire code adopted under chapter 19.27 RCW that are not more stringent than and do not directly conflict with the provisions of this chapter;
- (2) Local laws, ordinances, and resolutions pertaining to local authority to take immediate action in response to a release of a regulated substance;
- (3) Local laws, ordinances, and resolutions pertaining to permits and fees for the use of underground storage tanks in street right of ways that were in effect on July 1, 1990;
- (4) City, town, or county underground storage tank ordinances that are more stringent than the federal regulations and the uniform fire code adopted under chapter 19.27 RCW and were in effect on November 1, 1988. Under chapter 90.76 RCW, local jurisdictions were required to notify the department of the existence of such ordinances by July 1, 1989. The department received notification from the city of Redmond, and city of Renton, the city of Spokane, Spokane county, and Tacoma-Pierce county; and
- (5) Local laws, ordinances, and resolutions pertaining to the protection of environmentally sensitive areas that are more stringent than the requirements of this chapter and have been approved by the department under WAC 173-360A-130.

¹⁷ Incorporated statutory preemption of local program in RCW 90.76.110, which is included in the note under Part 5 of the current rule.

WAC 173-360A-130 Approval of more stringent local requirements¹⁸

A city, town, or county may adopt ordinances or resolutions establishing requirements for UST systems within an environmentally sensitive area that are more stringent than the state-wide requirements of this chapter, if approved by the department under this section. Designation of an environmentally sensitive area under this section is solely for the purposes of implementing chapter 90.76 RCW.

- (1) Application.** Any city, town, or county may apply to the department to have an area within its jurisdictional boundaries designated an environmentally sensitive area. A city, town, or county may also submit a joint application with any other city, town, or county for joint administration under chapter 39.34 RCW of a single environmentally sensitive area located in both jurisdictions.
- (a) Required information.** The application for designation of an environmentally sensitive area and approval of more stringent UST system requirements shall consist of a concise, factual report that provides sufficient information for the department to make a determination. The application must include the following:
- (i) A description and map of the area to be designated and where within the area the more stringent UST system requirements would apply;
 - (ii) A description of the physical characteristics of the area, including any available maps of underground water resources and recharge areas, and an explanation of why those characteristics make it especially vulnerable to the threats posed by releases from UST systems, considering the criteria in subsection (2) of this section;
 - (iii) A description of the more stringent requirements that would apply to UST systems in the area, and an explanation of why more stringent requirements are necessary to protect the area, considering:
 - (A) The possible impacts of contaminated groundwater on human health and the environment;
 - (B) Whether the statewide requirements of this chapter are sufficient to prevent releases that may contaminate the groundwater; and
 - (C) A description of any other measures in place or considered to protect groundwater or surface water from environmental threats;
 - (iv) Any written comments submitted by the public on the proposed designation under subsection (3) of this section, and an explanation of how those comments were addressed; and
 - (v) Documentation of coordination with affected state and local agencies and water user groups under subsection (3) of this section.

¹⁸ This section incorporates and merges together WAC 173-360-510 through 173-360-530.

- (b) Additional information.** The department may require additional information from the applicant if necessary to adequately evaluate the proposal. This information may include, but is not limited to, the following:
- (i) The geographic limits of the groundwater recharge zone;
 - (ii) The geographic limits of the underground water resource;
 - (iii) The geology within both the recharge zone and the underground water resource;
 - (iv) The location, yield, well depth, and present use of wells within the limits of the threatened underground water resource;
 - (v) The estimated capacity of the underground water resource;
 - (vi) The location, type, and number of UST systems in the area; and
 - (vii) Such other information the department deems necessary.
- (2) Designation criteria.** When applying to the department to designate an environmentally sensitive area, the applicant must demonstrate that the physical characteristics of the area make it especially vulnerable to the threats posed by releases from UST systems and that more stringent requirements for UST systems are necessary to protect the area. To do this, the applicant must demonstrate either:
- (a) The area is designated as a sensitive area for the purposes of protecting groundwater or surface water from pollution under another statute or regulation. If this demonstration is made, then the department shall approve its designation as an environmentally sensitive area. Those areas include, but are not limited to, the following:
 - (i) An aquifer identified as the primary source of supply for public water supply systems;
 - (ii) An aquifer underlying a critical water supply service area where the coordinated water system plan established pursuant to chapter 70.116 RCW has identified a need for a groundwater management program;
 - (iii) An aquifer designated as a sole source aquifer by the U.S. Environmental Protection Agency;
 - (iv) An area designated a certified groundwater management area identified under chapter 173-100 WAC; and
 - (v) An area designated an aquifer protection area, under chapter 36.36 RCW; or
 - (b) The area meets one or more of the following criteria. If this demonstration is made, then the department shall evaluate the application based on the overall sensitivity of the environment and the need for more stringent requirements:

- (i) The groundwater underlying the area is vulnerable to releases from UST systems based on the hydrogeological characteristics of the area, including but not limited to the following:
 - (A) Whether the area is a recharge area for underlying groundwater;
 - (B) The depth to groundwater;¹⁹
 - (C) The permeability of the soils;
 - (D) The amount of precipitation;
 - (E) The direction and quantity of groundwater flow; and
 - (F) The presence of aquitards;
- (ii) Proximity of the area to surface water that is hydrogeologically connected to groundwater if releases from an UST system may reasonably reach such groundwater based on the hydrogeological characteristics of the area;
- (iii) Proximity of the area to surface water²⁰ and wetlands;
- (iv) The area is located within a 100-year flood plain; or
- (v) Other criteria published by the department.

(3) Public involvement. Before submitting an application for designation and approval of more stringent UST system requirements under subsection (2) of this section, the applicant must:

- (a) Provide the public, affected local, state, and tribal agencies, and affected water user groups adequate notice and opportunity to comment on the application; and
- (b) Hold at least one public hearing for the purpose of receiving comments on the application from such persons.

(4) Review and approval.

- (a) Completeness.** Within thirty days of receiving an application, the department shall review the application for completeness and request any additional information needed in order for the application to be complete.
- (b) Public hearing.** Before approving or disapproving the application, the department may, at its discretion, hold an additional public hearing in the jurisdiction where the environmentally sensitive area is proposed.
- (c) Determination.** The department shall approve or disapprove the application. The department's determination shall be based on:

¹⁹ Added depth to groundwater to the non-exclusive list of hydrogeological characteristics.

²⁰ Added proximity to surface water to the non-exclusive list of factors.

- (i) Review of the application and any comments received;
 - (ii) Whether the area to be designated meets the definition of an environmentally sensitive area, based on the criteria specified in this section; and
 - (iii) Whether the proposed more stringent UST system requirements are necessary and reasonably consistent with previously approved local regulations for similar environmentally sensitive areas.
- (d) Resubmittal.** Applications disapproved by the department may be modified by the local government and resubmitted to the department for approval.
- (5) Applicability of approved programs.** Proposed local ordinances and resolutions shall become effective when approved by the department. An approved local ordinance or resolution may only apply to UST systems installed after the effective date of the ordinance or resolution.²¹
- (6) Local tank fees.** A city, town, or county with an approved ordinance or resolution under this section may establish an annual local tank fee in the environmentally sensitive area, subject to the approval of the department. To be approved, the annual local tank fee must not exceed fifty percent of the annual state tank fee, and must be demonstrated to be necessary for enhanced program administration and enforcement. Annual local tank fees authorized and collected under this section shall be deposited in the state underground storage tank account, established under RCW 90.76.100.

²¹ Eliminated provision that allowed Ecology-approved local ordinances or resolutions to apply to “existing UST systems” if the local jurisdiction applied within five years of the adoption of the original state rule. The deadline passed without any applications. The provision was changed to reflect a change in the authorizing statute in RCW 90.76.040.

WAC 173-360A-140 Intergovernmental agreements

In order to fully implement this chapter, and to protect surface and ground water resources that may cross jurisdictional boundaries, the department may negotiate and enter into cooperative agreements with Indian tribal governments, adjacent states, and Canadian governmental agencies. Such cooperative agreements shall not affect the regulatory jurisdiction of any party thereto with regard to any civil or criminal matters otherwise exercised by any party. Intergovernmental agreements shall further the purpose of this chapter, serve to establish a framework for intergovernmental coordination and cooperation, and serve to minimize duplication and efficiently utilize program resources to manage underground storage tanks and protect surface and ground water resources.

WAC 173-360A-150 Definitions

For the purposes of this chapter, the following definitions shall apply unless the context clearly requires otherwise.

~~() — "Aboveground release"²²~~

~~() — "Accidental release"²³~~

(1) **"Airport hydrant fuel distribution system" or "airport hydrant system"** means an UST system which fuels aircraft and operates under high pressure with large diameter piping that typically terminates into one or more hydrants (fill stands). The airport hydrant system begins where fuel enters one or more tanks from an external source such as a pipeline, barge, rail car, or other motor fuel carrier.²⁴

(2) **"Ancillary equipment"** means any devices including, but not limited to, spill prevention equipment, overfill prevention equipment, corrosion protection equipment, release detection equipment, containment sumps, and such devices as piping, fittings, flanges, valves, and pumps used to distribute, meter, or control the flow of regulated substances to and from an UST.²⁵

~~() — "Belowground release"²⁶~~

~~() — "Beneath the surface of the ground"²⁷~~

~~() — "Bodily injury"²⁸~~

(3) **"Cathodic protection"** means a technique to prevent corrosion of a metal surface by making that surface the cathode of an electrochemical cell. For example, an UST system can be cathodically protected through the application of either galvanic anodes or impressed current.

(4) **"Cathodic protection tester"** means an individual who can demonstrate an understanding of the principles and measurements of all common types of cathodic protection systems as applied to buried or submerged metal piping and tank systems. At a minimum, such individuals must have sufficient education and experience in soil resistivity, stray current, structure-to-soil potential, component electrical isolation measurements of buried metal piping and tank systems. Such individuals must be certified in accordance with WAC 173-360A-920(4).²⁹

²² Deleted term "aboveground release" because not used in rule. The term is only used in the MTCA cleanup regulations in WAC 173-340-450, which addresses cleanup of releases from UST systems.

²³ Moved term "accidental release" to Part 10 (Financial Responsibility).

²⁴ Added term "airport hydrant fuel distribution system" and defined in accord with §280.12 of the federal rule.

²⁵ Clarified definition of term "ancillary equipment" to include specific UST system components. This clarifies that an UST system includes such components.

²⁶ Deleted term "belowground release" because not used in rule. The term is only used in the MTCA cleanup regulations in WAC 173-340-450, which addresses cleanup of releases from UST systems.

²⁷ Deleted term "beneath the surface of the ground" and incorporated definition into the definition of "UST," which is the only usage of the term.

²⁸ Moved term "bodily injury" to Part 10 (Financial Responsibility).

²⁹ Added term "cathodic protection tester" and incorporated definition from §280.12 of the federal rule.

~~() "CERCLA"³⁰~~

~~() "Certified UST supervisor"³¹~~

- (5) **"Change-in-service"** means to change the substances stored in an UST system from regulated substances to unregulated substances.
- (6) **"Class A operator"** means an individual designated by an UST system owner or operator as having primary responsibility for the operation and maintenance of the system. The Class A operator typically manages resources and personnel, such as establishing work assignments, to achieve and maintain compliance with regulatory requirements.
- (7) **"Class B operator"** means an individual designated by an UST system owner or operator as having control of or responsibility for the day-to-day operation and maintenance of the system. The Class B operator typically performs or ensures the performance of operation and maintenance activities at an UST facility, maintains records of those activities, and reports those activities to the department.
- (8) **"Class C operator"** means an individual responsible for initially responding to alarms or other indications of emergencies caused by spills, overfills, leaks, or releases from an UST system. The Class C operator typically controls or monitors the dispensing or sale of regulated substances from the system.³²

~~() "Closure"³³~~

- (9) **"Code of practice"** means the most recent edition of a code of practice developed by a nationally or internationally recognized association or independent testing laboratory available at the time an UST system service is performed.³⁴
- (10) **"Compatible"** means the ability of two or more substances or materials to maintain their respective physical and chemical properties upon contact with one another for the design life of the UST system under conditions likely to be encountered in the UST system.³⁵
- (11) **"Connected piping"** means all underground piping including valves, elbows, joints, flanges, and flexible connectors attached to an UST system through which regulated substances flow. For the purpose of determining how much piping is connected to any individual UST system, the piping that joins two UST systems should be allocated equally between them.

³⁰ Deleted term "CERCLA" because only referenced once in rule.

³¹ Replaced existing term "certified UST supervisor" with new term "service provider."

³² Consistent with §280.12 of the federal rule, changed definition of term "Class C operator" to eliminate requirement that the person be an employee.

³³ Deleted term "closure" because definition is not needed. The existing definition is also not entirely correct because the term is not synonymous with the term "decommission."

³⁴ Added term "code of practice" to avoid defining each time term is used in the rule.

³⁵ Consistent with §280.12 of the federal rule, clarified definition of term "compatible" to include equipment other than tanks and piping.

~~() — "Consumptive use"³⁶~~

(12) **"Containment sump"** means a liquid-tight container that protects the environment by containing leaks and spills of regulated substances from piping, dispensers, pumps, and related components in the containment area. Containment sumps may be single walled or secondarily contained and located at the top of tank (tank top or submersible turbine pump sump), underneath the dispenser (under-dispenser containment sump), or at other points in the piping run (transition or intermediate sump).³⁷

~~() — "Controlling interest"³⁸~~

(13) **"Corrosion expert"** means an individual who, by reason of a thorough knowledge of the physical sciences and the principles of engineering and mathematics acquired by a professional education and related practical experience, is qualified to engage in the practice of corrosion control on buried or submerged metal piping systems and metal tanks. Such individuals must be certified in accordance with WAC 173-360A-920(2).³⁹

(14) **"Decommission"** means to permanently remove from operation a tank or pipe.⁴⁰

~~() — "Deferral"⁴¹~~

~~() — "Delegated agency"⁴²~~

~~() — "De minimis concentration"⁴³~~

(15) **"Department"** means the department of ecology.

(16) **"Dielectric material"** means a material that does not conduct direct electrical current. Dielectric coatings are used to electrically isolate UST systems from the surrounding soils. Dielectric bushings are used to electrically isolate portions of the UST system (e.g., tank from piping).

~~() — "Director"⁴⁴~~

(17) **"Dispenser"** means a device used to dispense⁴⁵ regulated substances from an UST system.

³⁶ Deleted term "consumptive use" and incorporated definition under description of heating oil UST system exemption in WAC 173-360A-110(1)(d), which is the only place where the term is used.

³⁷ Added term "containment sump" and defined as specified in §280.12 of the federal rule.

³⁸ Moved term "controlling interest" to Part 10 (Financial Responsibility).

³⁹ Moved certification requirements from definition of term "corrosion expert" to Part 9 (Service Providers).

⁴⁰ Changed definition of term "decommission" to exclude temporarily closure activities, which do not require service provider.

⁴¹ Deleted term "deferral" because no longer used in the rule.

⁴² Deleted term "delegated agency" because no longer used in the rule.

⁴³ Deleted term "de minimis concentration," which is used to specify exclusion in WAC 173-360A-110(1)(g), to resolve issues identified by EPA regarding which UST systems are excluded under the rule. The term confuses "concentrations" with "amounts." The term is not defined in the federal rule.

⁴⁴ Deleted term "director" because no longer used in the rule. The term was used in Part 10 (financial responsibility). The term has been replaced by the term "department."

⁴⁵ Clarified term "dispenser" to reflect fact that not all dispensers meter flow.

(18) **"Dispenser system"** means a dispenser and the aboveground equipment necessary to connect the dispenser to an UST system, including check valves, shear valves, unburied risers, flexible connectors, and other transitional components.

(19) **"Double-walled tanks" and "double-walled piping"** mean tanks and piping consisting of an inner wall and an outer wall with an interstitial space capable of being monitored for leaks.

(20) **"Electrical equipment"** means underground equipment that contains dielectric fluid that is necessary for the operation of equipment such as transformers and buried electrical cable.

~~() **"Emergency power generator"**~~

~~() **"Emergency power generator tank"**⁴⁶~~

(21) **"Environment"** means the term as defined in chapter 173-340 WAC.⁴⁷

(22) **"Excavation zone"** means the volume containing the UST system and backfill material bounded by the ground surface, walls, and floor of the pit and trenches into which the UST system is placed at the time of installation.

(23) **"Existing UST system"** means an UST system used to contain an accumulation of regulated substances or for which installation had commenced on or before December 22, 1988. Installation is considered to have commenced if:

- (a) The owner or operator had obtained all federal, state, and local approvals or permits necessary to begin physical construction at the UST facility or installation of the UST system; and
- (b) Either a continuous on-site physical construction or installation program had begun or the owner or operator had entered into contractual obligations—which cannot be canceled or modified without substantial loss—for physical construction at the UST facility or installation of the UST system to be completed within a reasonable time.

(24) **"Facility compliance tag"** means a white-colored metal plate with a green-colored identification number issued by the department for display at an UST facility in a location clearly visible to the product deliverer and persons withdrawing waste oil. Each UST facility is identified by a facility compliance tag. Except as otherwise provided in this chapter, it is unlawful for regulated substances to be delivered or deposited into an UST system, or withdrawn from a waste oil UST system, at an UST facility without a valid and properly displayed facility compliance tag.

~~() **"False alarm"**⁴⁸~~

⁴⁶ Deleted terms "emergency power generator" and "emergency power generator tank" because terms no longer used in rule to identify specific requirements for such systems. Notably, the rule no longer includes different release detection requirements for such systems. The terms are not defined in the federal rule.

⁴⁷ Added term "environment" and defined consistent with definition in the MTCA cleanup regulations (chapter 173-340 WAC).

⁴⁸ Deleted term "false alarm" and incorporated definition where term used in rule.

- (25) **"Farm UST system"** means an UST system located on a tract of land devoted to the production of crops or raising animals, including fish, and associated residences and improvements. A farm UST system must be located on the farm property and used for farm purposes. "Farm" includes fish hatcheries, rangeland, and nurseries with growing operations. It does not include laboratories where animals are raised, land used to grow timber, pesticide aviation operations, retail stores or garden centers where nursery products are marketed but not grown, cemeteries, golf courses, or other facilities dedicated primarily to recreation or aesthetics, or other nonagricultural activities.
- (26) **"Field-constructed tank"** means an underground storage tank that is constructed in the field. For example, the following are considered field-constructed tanks: a tank constructed of concrete that is poured in the field, or a steel or fiberglass tank primarily fabricated in the field.⁴⁹
- ~~() **"Financial reporting year"**~~⁵⁰
- ~~() **"Firm"**~~⁵¹
- (27) **"Flow-through process tank"** means a tank that forms an integral part of a production process through which there is a steady, variable, recurring, or intermittent flow of materials during the operation of the process. Flow-through process tanks do not include tanks used for the storage of materials prior to their introduction into the production process or for the storage of finished products or by-products from the production process.
- (28) **"Free product"** means the term as defined in chapter 173-340 WAC.⁵²
- (29) **"Gathering lines"** means any pipeline, equipment, facility, or building used in the transportation of oil or gas during oil or gas production or gathering operations.
- (30) **"Groundwater"** means the term as defined in chapter 173-340 WAC.⁵³
- (31) **"Hazardous substance"** means any substance defined in section 101(14) of the Comprehensive Environmental Response, Compensation, and Liability Act (42 U.S.C. Sec. 9601(14)). However, the term does not include any substance regulated as a hazardous waste under Subtitle C of the Solid Waste Disposal Act (42 U.S.C. Sec. 6921 through 6939e) or any mixture of such hazardous wastes and other regulated substances.⁵⁴

⁴⁹ Consistent with §280.12 of the federal rule, clarified definition of term "field-constructed tank" and included examples.

⁵⁰ Moved term "financial reporting year" to Part 10 (Financial Responsibility).

⁵¹ Deleted term "firm" to avoid confusion. The term is used to refer to more than just service providers.

⁵² Clarified definition of term "free product" to make consistent with definition in the MTCA cleanup regulations (chapter 173-340 WAC), which was amended in 2001.

⁵³ Clarified definition of term "groundwater" to make consistent with definition in the MTCA cleanup regulations (chapter 173-340 WAC). There is no change to the definition.

⁵⁴ Extracted definition of "hazardous substance" from definition of "hazardous substance UST system" and "regulated substance."

- (32) **"Hazardous substance UST system"** means an UST system that contains a hazardous substance or any mixture of such substances and petroleum, and which is not a petroleum UST system.⁵⁵
- (33) **"Heating oil"** means petroleum that is No. 1, No. 2, No. 4—light, No. 4—heavy, No. 5—light, No. 5—heavy, and No. 6 technical grades of fuel oil; other residual fuel oils (including Navy Special Fuel Oil and Bunker C); and other fuels when used as substitutes for one of these fuel oils. Heating oil is typically used in the operation of heating equipment, boilers, or furnaces.
- (34) **"Hydraulic lift tank"** means a tank holding hydraulic fluid for a closed-loop mechanical system that uses compressed air or hydraulic fluid to operate lifts, elevators, and other similar devices.
- ~~() — "**Immiscible**"⁵⁶~~
- (35) **"Include"** means included but not limited to.⁵⁷
- (36) **"Install"** means placing an UST system or any UST system component in position and preparing it to be placed into operation.⁵⁸
- (37) **"Interstitial space"** means the space between the primary and secondary containment systems (e.g., the space between the inner and outer walls of a tank or pipe).
- ~~() — "**Legal defense cost**"⁵⁹~~
- (38) **"License"** means the business license underground storage tank endorsement issued by the department of revenue under chapter 19.02 RCW.⁶⁰
- (39) **"Liquid trap"** means sumps, well cellars, and other traps used in association with oil and gas production, gathering, and extraction operations (including gas production plants), for the purpose of collecting oil, water, and other liquids. These liquid traps may temporarily collect liquids for subsequent disposition or reinjection into a production or pipeline stream, or may collect and separate liquids from a gas stream.
- (40) **"Maintenance"** means the normal operational upkeep to prevent an UST system from releasing a regulated substance.
- (41) **"Motor fuel"** means a complex blend of hydrocarbons typically used in the operation of a motor engine, such as motor gasoline, aviation gasoline, No. 1 or No. 2 diesel fuel, or any blend containing one or more of these substances (for example: motor gasoline blended with alcohol).⁶¹

⁵⁵ Extracted definition of "hazardous substance" from definition of "hazardous substance UST system" and "regulated substance."

⁵⁶ Deleted term "immiscible" because definition not needed. The term is used only once in Part 6 (Release Detection) and dictionary definition is sufficient.

⁵⁷ Added term "include" to avoid repetition of definition (including, but not limited to) each time term used in rule.

⁵⁸ Clarified definition of term "install" to reflect that not all equipment is placed in the ground.

⁵⁹ Moved term "legal defense cost" to Part 10 (Financial Responsibility).

⁶⁰ Added term "license" and used definition in RCW 90.76.010(1)(f).

⁶¹ Consistent with §280.12 of the federal rule, clarified definition of term "motor fuel" to include biofuels.

(42) **"New UST system"** means an UST system that will be used to contain an accumulation of regulated substances and for which installation commenced after December 22, 1988. (See also "existing tank system.")

(43) **"Noncommercial purposes"** with respect to motor fuel means not for resale.

~~() **"Occurrence"**⁶²~~

~~() **"On the premises where stored"**⁶³~~

(44) **"Operational life"** means the period beginning when installation of an UST system has commenced and ending when the UST system is permanently closed or undergoes a change-in-service.⁶⁴

(45) **"Operator"** means any person in control of, or having responsibility for, the daily operation of the UST system.

~~() **"Overfill release"**⁶⁵~~

(46) **"Owner"** means:

- (a) In the case of an UST system in use before November 8, 1984, but no longer in use on that date, any person who owned the UST system immediately before the discontinuation of its use;
- (b) In the case of an UST system in use on November 8, 1984, or brought into use after that date, any person who:
 - (i) Currently owns the UST system; or
 - (ii) Owned the UST system immediately before its permanent closure or change-in-service;⁶⁶ and
- (c) In the event that the owner of an UST system cannot be physically located, the "owner" shall be the person who owns the property where the UST system is located. The term "owner" does not include:
 - (i) Any person who holds indicia of ownership primarily to protect the person's security interest in the UST system or the UST facility or property where the UST system is located. The person holding indicia of ownership cannot participate in

⁶² Moved term "occurrence" to Part 10 (Financial Responsibility).

⁶³ Incorporated definition of term "on the premises where stored" under description of exempt UST system in WAC 173-360A-110(1)(d), which is the only place where the term is used.

⁶⁴ Clarified definition of term "operational life" to include periods of temporary closure.

⁶⁵ Deleted term "overfill release" because not used in existing or new rule.

⁶⁶ Clarified definition of "owner" to include owners during temporary closure and owners at the time of permanent closure or change-in-service.

the management of an UST system or be engaged in petroleum production, refining, and marketing;⁶⁷ and

- (ii) Any agency of the state or unit of local government which acquired ownership or control involuntarily through bankruptcy, tax delinquency, abandonment, or circumstances in which the government involuntarily acquires title. This exclusion does not apply to an agency of the state or unit of local government which has caused or contributed to a release or threatened release of a regulated substance from the UST system.

~~(i) "Owner or operator"~~⁶⁸

~~(i) "Party"~~⁶⁹

(47) "Permanently closed UST system" means:

- (a) In the case of an UST system taken out of operation before December 22, 1988, the UST system was substantially emptied of regulated substances or permanently altered structurally to prevent reuse;
- (b) In the case of an UST system taken out of operation on or after December 22, 1988, and before December 29, 1990, the UST system was permanently closed in accordance with 40 C.F.R. Sec. 280; and
- (c) In the case of an UST system taken out of operation on or after December 29, 1990, the UST system was permanently closed in accordance with this chapter.

(48) "Person" means an individual, trust, firm, joint stock company, corporation, association, partnership, consortium, joint venture, commercial entity, state, municipality, commission, political subdivision of a state, interstate body, federal government, or agency of the federal government.⁷⁰

(49) "Petroleum" means crude oil or any fraction thereof that is liquid at standard conditions of temperature and pressure (sixty degrees Fahrenheit and 14.7 pounds per square inch absolute) and any product comprised of a complex blend of hydrocarbons, such as motor fuels, jet fuels, distillate fuel oils, residual fuel oils, lubricants, petroleum solvents, and used oils. The term does not include propane or asphalt or any other product that is not liquid at standard conditions of temperature and pressure.^{71 72}

⁶⁷ Changed lender liability exclusion to comply with federal requirements for state program approval in §281.38(a)(2) of the federal rule.

⁶⁸ Moved term "owner or operator" to Part 10 (Financial Responsibility).

⁶⁹ Deleted term "party" because definition not needed.

⁷⁰ Clarified definition of "person" to include "associations" and "partnerships," consistent with chapter 173-340 WAC (MTCA cleanup regulations).

⁷¹ Extracted definition of "petroleum" from definition of "regulated substance."

⁷² Consistent with §280.12 of the federal rule, changed definition of "petroleum" to include petroleum derived from non-crude oil products.

~~() "Petroleum marketing facilities"⁷³~~

~~() "Petroleum marketing firms"⁷⁴~~

(50) **"Petroleum UST system"** means an UST system that contains petroleum or a mixture of petroleum with de minimis quantities of other regulated substances. Such systems include those containing motor fuels, jet fuels, distillate fuel oils, residual fuel oils, lubricants, petroleum solvents, and used oils.

(51) **"Pipe" or "piping"** means a hollow cylinder or tubular conduit that is constructed of nonferrous materials.

(52) **"Pipeline facilities (including gathering lines)"** means any new and existing pipe rights-of-way and any associated equipment, facilities, or buildings.

(53) **"Piping run"** means all underground piping connecting an individual submersible pump or suction stub to associated dispenser systems or other end-use equipment.

(54) **"Previously deferred UST system"** means an UST system with field-constructed tanks or an airport hydrant fuel distribution system.⁷⁵

(55) **"Product deliverer"** means any person who delivers or deposits product into an UST system. This term includes major oil companies, jobbers, petroleum transportation companies, or other product delivery entities.

~~() "Property damage"⁷⁶~~

~~() "Provider of financial assurance"⁷⁷~~

(56) **"Rectifier adjustment"** means any adjustment or maintenance of a rectifier that is part of an impressed current cathodic protection system, including any adjustment of voltage or amperage or replacement of fuses or diodes.⁷⁸

(57) **"Red tag"** means a red-colored tag or device on the fill pipe of an UST system that clearly identifies the system as ineligible for product delivery or waste oil withdrawal. The tag or device is tamper resistant and is easily visible to the product deliverer and persons withdrawing waste oil. The tag or device clearly states and conveys, as applicable, that it is unlawful for regulated substances to be delivered or deposited into an UST system or withdrawn from a waste oil UST system.

(58) **"Regulated substance"** means:

⁷³ Moved term to Part 10 (Financial Responsibility).

⁷⁴ Deleted term "petroleum marketing firms" because no longer used in Part 10 (Financial Responsibility), consistent with changes to §280.92 of the federal rule.

⁷⁵ Added term "previously deferred UST system" to avoid repeating definition each time used in rule.

⁷⁶ Moved term "property damage" to Part 10 (Financial Responsibility).

⁷⁷ Moved term "provider of financial assurance" to Part 10 (Financial Responsibility).

⁷⁸ Added term "rectifier adjustment" to help clarify who may perform such services.

- (a) Petroleum;
 - (b) Hazardous substances; and
 - (c) Mixtures of petroleum and hazardous substances.⁷⁹
- (59) **"Release"** means any spilling, overfilling, leaking, emitting, discharging, escaping, leaching, or disposing of regulated substances from an UST system into the environment.⁸⁰
- (60) **"Release detection"** means determining whether a release of a regulated substance has occurred from the UST system into the environment or a leak has occurred into the interstitial space between the UST system and its secondary containment.⁸¹
- (61) **"Remedial action"** means the term as defined in chapter 173-340 WAC.⁸²
- (62) **"Repair"** means to restore to proper operating condition a tank, pipe, spill prevention equipment, overfill prevention equipment, corrosion protection equipment, release detection equipment, containment sump, or other UST system component that has caused a release of a regulated substance from the UST system or has failed to function properly.⁸³
- (63) **"Residential UST system"** means an UST system located on property used primarily for dwelling purposes. Such properties do not include dormitories, convents, mobile parks, apartments, hotels and similar facilities, unless the UST system is used by the owner solely for his or her own personal use, rather than to maintain the overall facility.
- ~~() **"Retrofitting"**~~⁸⁴
- (64) **"Secondary containment"** means a release prevention system for tanks and piping consisting of an inner barrier and an outer barrier with an interstitial space capable of being monitored for leaks. This term includes containment sumps when used for interstitial monitoring of piping.⁸⁵
- (65) **"Septic tank"** means a water-tight covered receptacle designed and used to receive or process, through liquid separation or biological digestion, the sewage discharged from a building sewer. The effluent from such receptacle is distributed for disposal through the soil and settled solids and scum from the tank are pumped out periodically and hauled to a treatment facility.

⁷⁹ Extracted definitions of "petroleum" and "hazardous substance" from definition of "regulated substance."

⁸⁰ Clarified definition of term "release" to include any entry of regulated substances into the environment, consistent with definition and use of other terms, such as release detection.

⁸¹ Consistent with §280.12 of the federal rule, clarified definition of "release detection" to include leaks into interstitial spaces. Also eliminated reference to "secondary barriers," which are no longer allowed as a type of secondary containment under the state rule.

⁸² Replaced federal term "corrective action" with state term "remedial action" to make usage consistent with chapter 173-340 WAC (MTCA cleanup regulations).

⁸³ Consistent with §280.12 of the federal rule, changed definition of term "repair" to include the restoration of any component that is not functioning properly.

⁸⁴ Deleted term "retrofitting" because term no longer used in rule.

⁸⁵ Consistent with §280.12 of the federal rule, changed definition of term "secondary containment" to clarify that it includes containment sumps used for interstitial monitoring.

- (66) **"Service provider"** means an individual who is certified to perform or directly supervise the performance of UST system services under WAC 173-360A-920.⁸⁶
- (67) **"Site assessment"** means an investigation of the environment around an UST system to determine whether there has been a release of regulated substances from the system into the environment and whether a release may pose a threat to human health or the environment.⁸⁷
- (68) **"Site check"** means a site assessment performed when a release from an UST system is suspected.⁸⁸
- (69) **"Stormwater or wastewater collection system"** means piping, pumps, conduits, and any other equipment necessary to collect and transport the flow of surface water run-off resulting from precipitation, or domestic, commercial, or industrial wastewater to and from retention areas or any areas where treatment is designated to occur. The collection of stormwater and wastewater does not include treatment except where incidental to conveyance.
- ~~() **"Structural defect"**⁸⁹~~
- ~~() **"Substantial business relationship"**⁹⁰~~
- ~~() **"Supervisor"**⁹¹~~
- (70) **"Surface impoundment"** means a natural topographic depression, excavation, or diked area formed primarily of earthen materials (although it may be lined with synthetic materials) that is not an injection well.
- ~~() **"Tangible net worth"**⁹²~~
- (71) **"Tank"** is a stationary device designed to contain an accumulation of regulated substances and constructed of nonearthen materials (e.g., concrete, steel, plastic) that provide structural support.
- ~~() **"Tank permit"**⁹³~~
- ~~() **"Tank services"**⁹⁴~~
- (72) **"Temporarily closed UST system"** means an UST system that has been removed from operation and will be returned to operation, undergo a change-in-service, or be permanently closed in the future.

⁸⁶ Replaced term "certified UST supervisor" and "supervisor" with term "service provider."

⁸⁷ Changed definition of "site assessment" to include any investigation of the environment, including "site checks."

⁸⁸ Changed definition of "site check" to define as a type of "site assessment."

⁸⁹ Deleted term "structural defect" because the term is no longer used in the rule. The term was used in a provision that required upgrades of existing UST systems upon any repair to a structural defect of such systems.

⁹⁰ Moved term "substantial business relationship" to Part 10 (Financial Responsibility).

⁹¹ Replaced term "supervisor" with term "service provider."

⁹² Moved term "tangible net worth" to Part 10 (Financial Responsibility).

⁹³ Replaced term "tank permit" with the terms "license" and "facility compliance tag."

⁹⁴ Replaced term "tank services" with the term "UST system services."

~~() — "Termination"⁹⁵~~

~~() — "Testing"⁹⁶~~

(73) "Tightness testing" means a procedure for testing the ability of an UST system component to prevent an inadvertent release of regulated substances into the environment or an intrusion of groundwater into an UST system.⁹⁷

(74) "Under-dispenser containment" or "UDC" means containment underneath a dispenser system designed to prevent leaks from the dispenser system from reaching the environment.⁹⁸

~~() — "Underground area"⁹⁹~~

~~() — "Underground release"¹⁰⁰~~

(75) "Underground storage tank" or "UST" means any one or combination of tanks (including underground pipes connected thereto) that is used to contain an accumulation of regulated substances, and the volume of which (including the volume of underground pipes connected thereto) is ten percent or more beneath the ground surface or otherwise covered by earthen materials.^{101 102}

(76) "Upgrade" means the addition or retrofit of an UST system component, such as corrosion protection equipment, release detection equipment,¹⁰³ or spill and overfill prevention equipment, to improve the ability of an UST system to prevent the release of regulated substances.

(77) "UST facility" means the location where one or more UST systems are or will be installed. The term encompasses all contiguous real property under common ownership associated with the operation of the UST system or systems.¹⁰⁴

~~() — "UST site" or "site"¹⁰⁵~~

⁹⁵ Moved term "termination" to Part 10 (Financial Responsibility).

⁹⁶ Deleted term "testing" because definition is not needed. The term is not defined in the federal rule.

⁹⁷ Clarified definition of "tightness testing" to include tightness testing of any UST system component (not just tanks and piping), consistent with new operation and maintenance requirements in Part 4 of the rule.

⁹⁸ Clarified definition of "under-dispenser containment" to include any release to the environment, consistent with definitions of "release" and "release detection."

⁹⁹ Deleted term "underground area" and incorporated definition in description of exempt UST system in WAC 173-360A-110(1)(c), which is the only place where the term is used.

¹⁰⁰ Deleted term "underground release" because not used in rule.

¹⁰¹ Deleted term "beneath the surface of the ground" and incorporated definition into the definition of "underground storage tank." This is the only use of the term.

¹⁰² Deleted statement from definition of "underground storage tank" that excludes exempt UST systems. The applicability of the rule to UST systems is set forth in WAC 173-360A-110, not in this definition.

¹⁰³ Clarified definition of term "upgrade" to include release detection equipment.

¹⁰⁴ Replaced term "UST site" with term "UST facility" to reflect usage of term facility in statute and throughout rule.

¹⁰⁵ Replaced term "UST site" with term "UST facility" to reflect usage of term facility in statute and throughout rule.

- (78) **"UST system" or "tank system"** means an underground storage tank, connected underground piping, underground ancillary equipment, and containment system, if any.
- (79) **"UST system component"** means a component of an UST system, including any underground storage tanks, connected underground piping, underground ancillary equipment, and containment systems.¹⁰⁶
- (80) **"UST system services"** means the services performed on an UST system requiring the use of a service provider as specified in WAC 173-360A-920.¹⁰⁷
- (81) **"Wastewater treatment tank system"** means a tank system that is designed to receive and treat an influent wastewater through physical, chemical, or biological methods.

¹⁰⁶ Added term "UST system component" to reflect increased usage throughout rule.

¹⁰⁷ Replaced term "tank services" with term "UST system services." The new term is defined to include services involving cathodic protection systems.

WAC 173-360A-190 Severability¹⁰⁸

If any provision of this chapter or its application to any person or circumstance is held invalid, the remainder of this chapter or the application of the provision to other persons or circumstances shall not be affected.

¹⁰⁸ Added severability clause.

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Part 2: Administration and Enforcement

Crosswalk of Sections

TOPIC	AMENDED RULE §	CURRENT RULE §	FEDERAL RULE §
Administration and enforcement	Part 2	In Part 1	In Subparts B and K
Licensing of UST systems	200	130(1)-(3), (8)-(10) 200(2)-(4), (6)	20(e) 22(a)-(f) 251(b)
Fees for UST systems	210	190	--
Facility compliance tags	220	--	--
Reporting requirements	230	200(7) 210(1)	22(g) 34(a)
Recordkeeping requirements	240	200(2)-(3)	34(b)-(c)
Compliance monitoring, investigation, and access	250	140 150 In 210	--
Information sharing	260	In 180	--
Enforcement	270	160 In 180	--
Delivery prohibition	280	165	--
Civil penalties	290	170	--

WAC 173-360A-200 Licensing of UST systems¹⁰⁹

- (1) Requirement for a license.** An owner or operator shall maintain a license for each tank until the UST system has undergone permanent closure or a change-in-service. Without the prior written authorization of the department, an UST system may not be operated without a license for each tank. Possession of a license does not preclude enforcement against owners and operators under this chapter, chapter 90.76 RCW, or other laws.
- (2) Eligibility for a license.** To be eligible for a license, an UST system must be in compliance with the requirements of this chapter and chapter 90.76 RCW.
- (3) Application for a license.**
 - (a) An owner or operator must apply for a license within thirty days of the following:
 - (i) Installation of an UST system or tank; or
 - (ii) Change in the owner or operator holding a license.
 - (b) To apply for a license, an owner or operator must submit the following to the department of revenue:
 - (i) Business license application;
 - (ii) Underground storage tank addendum;
 - (iii) Proof of financial responsibility (WAC 173-360A-1045(1)(a));
 - (iv) Certification of installation, if applying upon installation of an UST system or tank (WAC 173-360A-300(6)); and
 - (v) Annual tank fees (WAC 173-360A-210(1)) and any other applicable fees identified by the department of revenue (WAC 458-02-200(2)).
 - (c) Applications for UST systems located at different UST facilities must be submitted using separate forms, one for each facility.
- (4) Notification of changes in financial assurances.** Upon any change in the financial assurance mechanism(s) used to demonstrate financial responsibility or upon receipt of a notice of cancellation or termination of any such mechanism, the owner or operator must immediately notify the department of revenue in accordance with WAC 173-360A-1045(1)(b) and (c). Licenses will not be renewed without proof of financial responsibility.
- (5) Notification of changes in owners or operators.** Within thirty days of any change in the owner or operator not holding a license, the owner or operator must notify the department of ecology using the applicable form provided by the department of ecology.

¹⁰⁹ Incorporated licensing facility compliance tag requirements for UST systems specified in RCW 90.76.020(4) and (5). Processes reflect current practice under the statute.

- (6) Renewal of a license.**
- (a) Licenses must be renewed annually. To renew a license, the owner or operator must submit the following to the department of revenue:
 - (i) Renewal application; and
 - (ii) Annual tank fees (WAC 173-360A-210(1)) and any other applicable fees identified by the department of revenue (WAC 458-02-200(2)).
 - (b) If a license is not renewed by the expiration date, the department of revenue may assess a delinquency fee (WAC 458-02-200(2) and (8)). The department of ecology may also assess a penalty under WAC 173-360A-290.
- (7) Display of a license.** Licenses must be displayed in a conspicuous place at the UST facility where the tanks are located (WAC 458-02-200(7)).
- (8) Revocation and appeals.** The department of ecology may revoke a license if an UST system is violating any requirement of this chapter or chapter 90.76 RCW. The revocation of a license may be appealed to the pollution control hearings board in accordance with chapter 43.21B RCW.

WAC 173-360A-210 Fees for UST systems

- (1) Payment.** Annually, the owner of an UST system shall pay the following fees for each tank until the system has undergone permanent closure or a change-in-service.¹¹⁰

 - (a) The state tank fee specified by the department under subsection (3) of this section; and
 - (b) Any applicable local tank fee approved by the department under WAC 173-360A-130(6).
- (2) Disposition.** State and local tank fees collected under this section shall be deposited in the account established under RCW 90.76.100.
- (3) State tank fees.** Effective July 1, 2018, the state tank fee is one hundred seventy-three dollars and eighty cents per tank.¹¹¹ Annually, upon a finding by the department that a fee increase is necessary, the department may increase the state tank fee up to the fiscal growth factor for the next year. The fiscal growth factor is calculated by the office of financial management under RCW 43.135.025. The department shall publish the new fee by March 1st before the year for which the new fee is effective. The new fee is effective from July 1st to June 30th of every year.
- (4) Preemption of local tank fees.** Except as provided under WAC 173-360A-130(6), no local government may levy an annual tank fee on the ownership or operation of an underground storage tank.¹¹²

¹¹⁰ Eliminated requirement that owners must pay fees after an UST system has undergone permanent closure or a change-in-service until any releases have been cleaned up.

¹¹¹ Incorporated changes to the state tank fee authorized under RCW 90.76.090 since the rule was last amended.

¹¹² Addressed authorization of local tank fees in WAC 173-360A-130.

WAC 173-360A-220 Facility compliance tags¹¹³

- (1) Requirement for tag.** Without the prior written authorization of the department, regulated substance may not be delivered or deposited into an UST system, or withdrawn from a waste oil UST system, at an UST facility without a valid and properly displayed facility compliance tag.
- (2) Eligibility for tag.** To be eligible for a facility compliance tag, an UST facility must be in compliance with the requirements of this chapter and chapter 90.76 RCW.
- (3) Issuance of tag.** The department will issue a facility compliance tag for an UST facility upon the initial issuance of a license for an UST system at the facility under WAC 173-360A-200.
- (4) Display of tag.** A facility compliance tag must be displayed at an UST facility in a location that is clearly visible to product deliverers and persons withdrawing waste oil.
- (5) Revocation and appeals.** The department may revoke a facility compliance tag if an UST facility is violating any requirement of this chapter or chapter 90.76 RCW. The revocation of a facility compliance tag may be appealed to the pollution control hearings board in accordance with chapter 43.21B RCW.
- (6) Return upon temporary closure of facility.** If all UST systems at an UST facility are temporarily closed more than ninety days, then owners and operators must return the facility compliance tag to the department within one hundred and twenty days of temporary closure. The department will reissue a facility compliance tag to the UST facility in accordance with WAC 173-360A-800(5)(d).
- (7) Return upon permanent closure or change-in-service of facility.** Within thirty days of the permanent closure or change-in-service of all UST systems at an UST facility, owners and operators must return the facility compliance tag to the department.

¹¹³ Incorporated facility compliance tag requirements for UST systems, as specified in RCW 90.76.020(5). Processes reflects current practices under the statute.

WAC 173-360A-230 Reporting requirements

- (1) Licensing of UST systems.** An owner or operator shall apply for and renew licenses for UST systems and provide notice of any change in the owner or operator of an UST system in accordance with WAC 173-360A-200.
- (2) Changes to UST systems.** Owners and operators shall notify the department of the following:¹¹⁴
 - (a) Intent to install an UST system or a tank or piping run (WAC 173-360A-300(1));
 - (b) Change in the regulated substance stored in an UST system (WAC 173-360A-410(1));
 - (c) Change in the release detection method used for a tank or pipe (WAC 173-360A-600(4));
 - (d) Temporary closure of an UST system (WAC 173-360A-800(1) and (2));
 - (e) Return to operation of a temporarily closed UST system (WAC 173-360A-800(5)(b));
 - (f) Intent to permanently close an UST system or a tank or piping run (WAC 173-360A-810(1)); and
 - (g) Intent to undertake a change-in-service of an UST system (WAC 173-360A-820(1)).
- (3) UST system services.**
 - (a) Types.** All UST system services must be certified and reported in accordance with (b) of this subsection, including:¹¹⁵
 - (i) Installations of an UST system or an UST system component (WAC 173-360A-300(5));
 - (ii) Upgrades of existing UST systems (WAC 173-360A-320(1)(b));
 - (iii) Upgrades of previously deferred UST systems (WAC 173-360A-330(1)(b));
 - (iv) Tests of cathodic protection systems (WAC 173-360A-430(2)(c));
 - (v) Internal inspections of lined tanks (WAC 173-360A-440(4));
 - (vi) Tightness tests of containment sumps (WAC 173-360A-450(3));
 - (vii) Tightness tests of spill prevention equipment (WAC 173-360A-460(3));
 - (viii) Inspections of overfill prevention equipment (WAC 173-360A-470(3));
 - (ix) Tests of electronic or mechanical release detection equipment (WAC 173-360A-480(4));

¹¹⁴ Updated list of UST system changes that must be reported based on changes elsewhere in the chapter (such as changes in regulated substances stored in the UST system).

¹¹⁵ Updated list of UST system services that must be certified and reported based on changes elsewhere in the chapter (such as new operation and maintenance testing and inspections).

- (x) Tightness test of secondary containment areas of tanks or piping used for interstitial monitoring (WAC 173-360A-490(6));
 - (xi) Repairs of UST systems or components (WAC 173-360A-490(4));
 - (xii) Tightness tests of tanks (WAC 173-360A-635(2)(c));
 - (xiii) Tightness tests of piping (WAC 173-360A-650(2)(c));
 - (xiv) Site evaluations for vapor or groundwater monitoring systems (WAC 173-360A-660(1)(f) and 173-360A-665(1)(f));
 - (xv) Site assessments, including site checks (WAC 173-360A-730(7));
 - (xvi) Decommissioning of an UST system or a tank or pipe upon permanent closure (WAC 173-360A-810(3)(c)); and
 - (xvii) Decommissioning of an UST system upon a change-in-service (WAC 173-360A-820(3)(c)).
- (b) Reporting.** All UST system services must be certified and reported within thirty days of completion of the services as follows.
- (i) Checklists.** For all UST system services:
 - (A) The service provider must complete the applicable checklist provided by the department of ecology; and
 - (B) An owner or operator must sign and submit the completed checklist as follows:
 - (I) For installations of UST systems or tanks, to the department of revenue when applying for a license (WAC 173-360A-200(3));¹¹⁶ and
 - (II) For all other UST system services, to the department of ecology.
 - (ii) Reports.** For site assessments (WAC 173-360A-730) and site evaluations for vapor or groundwater monitoring systems (WAC 173-360A-660(1)(f) or 173-360A-665(1)(f))¹¹⁷:
 - (A) The service provider must complete a report meeting the applicable requirements of this chapter; and
 - (B) The owner or operator must submit the completed report to the department with the applicable checklist.

¹¹⁶ Changed process for certifying and reporting installations of UST systems and tanks. Installation checklists must be submitted with license application.

¹¹⁷ Added site evaluations to the type of services requiring submission of a report.

- (4) Releases from UST systems.** Owners and operations shall notify the department of the following:
- (a) All suspected releases (WAC 173-360A-700);
 - (b) All spills and overfills resulting in a release that may pose a threat to human health or the environment or that have not been cleaned up within twenty-four hours (WAC 173-360A-740); and
 - (c) All confirmed releases that may pose a threat to human health or the environment (WAC 173-360A-750(1)).
- (5) Cleanups of releases from UST systems.** Owners and operators shall report remedial actions to the department in accordance with WAC 173-360A-750(4).
- (6) Financial responsibility for UST systems.**
- (a) Owners or operators shall certify compliance with financial responsibility requirements in accordance with WAC 173-360A-1045(1) and WAC 173-360A-200.
 - (b) Owners or operators shall submit evidence of financial responsibility in accordance with WAC 173-360A-1045(2) and (3).
- (7) Requirements for sellers and lessors.**
- (a) Any person who sells a tank must notify the new owner of the licensing requirements in WAC 173-360A-200.¹¹⁸
 - (b) Any person who leases a tank must notify the new operator of the licensing requirements in WAC 173-360A-200.¹¹⁹
- (8) Requirements for service providers.** Service providers shall comply with the reporting requirements in WAC 173-360A-930.

¹¹⁸ Eliminated requirement that persons who sell property containing UST systems must notify buyer of licensing requirements. Persons who sell tanks, whether new or installed, must still notify buyer.

¹¹⁹ Added requirement that any person who leases tank must notify lessees.

WAC 173-360A-240 Recordkeeping requirements

- (1) Records.** Owners and operators shall maintain records of the following:¹²⁰
- (a) Installation of UST systems and UST system components (WAC 173-360A-300(8));
 - (b) Periodic walk-through inspections, and if applicable, delivery records (WAC 173-360A-420(4));
 - (c) Tests of cathodic protection systems (WAC 173-360A-430(2)(d));
 - (d) Rectifier inspections (WAC 173-360A-430(3)(d));
 - (e) Internal inspections of lined tanks (WAC 173-360A-440(5));
 - (f) Periodic monitoring and tightness tests of containment sumps (WAC 173-360A-450(4));
 - (g) Periodic monitoring and tightness tests of spill prevention equipment (WAC 173-360A-460(4));
 - (h) Inspections of overfill prevention equipment (WAC 173-360A-470(4));
 - (i) Operation and maintenance, including tests, of release detection equipment (WAC 173-360A-480(5));
 - (j) Tightness tests of secondary containment areas of tanks and piping (WAC 173-360A-490(6));
 - (k) Repairs of UST systems and UST system components (WAC 173-360A-490(8));
 - (l) Current operation and maintenance plans (WAC 173-360A-545(5));
 - (m) Currently designated operators and training (WAC 173-360A-560);
 - (n) Compliance with release detection requirements (WAC 173-360A-600(9));
 - (o) Site assessments, including site checks (WAC 173-360A-730(9));
 - (p) Investigation and cleanup of confirmed releases (WAC 173-360A-750(4)); and
 - (q) Compliance with financial responsibility requirements (WAC 173-360A-1040).
- (2) Availability of records.** Owners and operators shall make all records required under subsection (1) of this section available for inspection upon request by the department.^{121 122}

¹²⁰ Updated list of records that must be maintained based on changes elsewhere in the chapter.

¹²¹ Eliminated specific requirement about where records must be maintained. Clarified that records only need to be made available for inspection upon request.

¹²² Eliminated requirement that permanent closure records must be maintained since such records must already be submitted to Ecology.

- (3) Transfer of records.** Owners and operators shall transfer all records required under subsection (1) of this section to new owners and operators.¹²³
- (4) Service providers.** Service providers shall maintain records of certification in accordance with WAC 173-360A-930(1)(b).

¹²³ Added requirement that records must be transferred upon changes in ownership or operation.

WAC 173-360A-250 Compliance monitoring, investigation, and access.¹²⁴

- (1) The department's compliance monitoring program, including procedures for inspections and recordkeeping, shall be consistent with and no less stringent than the program required by 40 C.F.R. Sec. 281.40, as amended, and section 9005 of the Solid Waste Disposal Act (42 U.S.C. Sec. 6991d).¹²⁵
- (2) If necessary to determine compliance with the requirements of this chapter or chapter 90.76 RCW, an authorized representative of the state engaged in compliance inspections, monitoring or testing may, by request, require an owner or operator to submit relevant information or documents. The department may subpoena witnesses, documents, and other relevant information that the department deems necessary. In the case of any refusal to obey the subpoena, the superior court for any county in which the person is found, resides, or transacts business has jurisdiction to issue an order requiring the person to appear before the department and give testimony or produce documents. Any failure to obey the order of the court may be punished by the court as contempt.
- (3) Any authorized representative of the state may require an owner or operator to conduct monitoring or testing.
- (4) Upon reasonable notice, an authorized representative of the state may enter a premises or UST facility subject to regulation under this chapter or in which records relevant to the operation of an UST system are kept. In the event of an emergency or in circumstances where notice would undermine the effectiveness of an inspection, notice is not required. The authorized representative may copy records, obtain samples of regulated substances, and inspect or conduct monitoring or testing of an UST system.
- (5) Owners and operators of UST systems shall cooperate fully with inspections, monitoring, and testing conducted by the department, as well as requests for document submission, testing, and monitoring by the owner or operator under this section.
- (6) For purposes of this section, the term "authorized representative" or "authorized representative of the state" means an enforcement officer, employee, or representative of the department.

¹²⁴ Combined WAC 173-360-140 and 173-360-150, and first sentence of WAC 173-360-210.

¹²⁵ Added requirement that compliance monitoring program must be consistent with, and no less stringent than, the program required by the underground storage tank compliance act of 2005, consistent with changes to RCW 90.76.005 and 90.76.020.

WAC 173-360A-260 Information sharing

The department's procedures for sharing information with the U.S. Environmental Protection Agency shall be consistent with and no less stringent than those required by 40 C.F.R. Sec. 281.43, as amended.¹²⁶

¹²⁶ Moved the portion of the current provision in WAC 173-360-180 addressing public participation in the enforcement process to WAC 173-360A-270 (enforcement).

WAC 173-360A-270 Enforcement

- (1) **Authority.** The director may seek appropriate injunctive or other judicial relief by filing an action in Thurston County Superior Court or issuing such order as the director deems appropriate to:
- (a) Enjoin any threatened or continuing violation of this chapter or chapter 90.76 RCW;
 - (b) Restrain immediately and effectively a person from engaging in unauthorized activity that results in a violation of any requirement of this chapter or chapter 90.76 RCW and is endangering or causing damage to public health or the environment;
 - (c) Require compliance with requests for information, access, testing, or monitoring under WAC 173-360A-250 or RCW 90.76.060;
 - (d) Prohibit the delivery, deposit, or acceptance of a regulated substance to an UST system identified by the department to be ineligible for such delivery, deposit, or acceptance in accordance with WAC 173-360A-280 and chapter 90.76 RCW; or
 - (e) Assess and recover civil penalties authorized under WAC 173-360A-290 and RCW 90.76.080.
- (2) **Procedures.** The department's enforcement procedures shall be consistent with and no less stringent than those required by 40 C.F.R. Sec. 281.41, as amended, and section 9012 of the Solid Waste Disposal Act (42 U.S.C. Sec. 6991k).
- (3) **Appeals.** A person subject to an order issued under this chapter may appeal the order to the pollution control hearings board in accordance with RCW 43.21B.310.
- (4) **Public participation.** The department's procedures for public participation in the state enforcement process shall be consistent with and no less stringent than those required by 40 C.F.R. Sec. 281.42, as amended.¹²⁷ The department will not oppose intervention of right under Superior Court Civil Rule 24(a)(2) in a civil enforcement action taken under this chapter or chapter 90.76 RCW on the grounds that the person's interest is adequately represented by the state.¹²⁸

¹²⁷ Incorporated the portion of the current provision in WAC 173-360-180 addressing public participation in the enforcement process.

¹²⁸ To comply with state program approval requirements in §281.42, clarified how the state will ensure public participation in the enforcement process.

WAC 173-360A-280 Delivery prohibition

- (1) Authority.** If the department determines the owners and operators of an UST system are violating any requirement of this chapter or chapter 90.76 RCW, the department may prohibit the delivery, deposit, or acceptance of regulated substances to the system or the entire UST facility where the system is located.
- (2) Procedures.** The department's procedures for enforcing delivery prohibition shall be consistent with and no less stringent than those required by section 9012 of the Solid Waste Disposal Act (42 U.S.C. Sec. 6991k).
- (3) Identification.** The department may identify an UST system subject to delivery prohibition by either:

 - (a) Affixing a red tag to the fill pipe of the system; or
 - (b) Revoking the facility compliance tag of the UST facility where the system is located.
- (4) Prohibition.** Without the prior written authorization of the department, product deliverers may not deliver or deposit, and owners and operators may not accept the delivery or deposit of, regulated substances into an UST system if:

 - (a) A red tag is attached to the fill pipe of the system; or
 - (b) A valid facility compliance tag is not properly displayed at the UST facility where the system is located.
- (5) Withdrawal of waste oil.** Without the prior written authorization of the department, persons may not withdraw, and owners and operators may not allow the withdrawal of, regulated substances from a waste oil UST system subject to delivery prohibition.
- (6) Unauthorized removal of red tags.** No person may remove or alter a red tag without the prior written authorization of the department. The unauthorized removal or alteration of a red tag constitutes a violation of this chapter.

WAC 173-360A-290 Civil penalties

- (1) Any person who fails to notify the department pursuant to the notification requirements of this chapter, or who submits false information, is subject to a civil penalty not to exceed five thousand dollars per violation.
- (2) Any person who violates this chapter is subject to a civil penalty not to exceed five thousand dollars for each tank per day of violation.
- (3) Penalties may be appealed to the pollution control hearings board, pursuant to chapter 43.21B RCW.

Part 3: Installation and Performance Standards

Crosswalk of Sections

TOPIC	AMENDED RULE §	CURRENT RULE §	FEDERAL RULE §
Installation requirements	Part 3	In Parts 2, 3, 8	In Subparts A, B, C, D, K
Installation of UST systems	300	305(4)-(5) 200(1), (3), (5)	20(d)-(e) In 22
Performance standards for new UST systems	310	305(1)-(3) 340 810 820 830	20(a)-(c) 42 251(a), (d) 252(a)
Upgrade requirements for existing UST systems	320	310 340(1)	21 42
Upgrade requirements for previously deferred UST systems	330	Deferred	251(a), (c) 252(b)
Performance standards for partially exempt UST systems	340	300	11
Compatibility requirements for UST systems	350	323	32

WAC 173-360A-300 Installation of new UST systems and components¹²⁹

Owners and operators shall ensure new UST systems and new UST system components are installed in accordance with the requirements of this subsection.

- (1) Notice before commencement.** Except for emergency replacements, owners and operators shall notify the department of their intent to install an UST system, or a tank or piping run that is part of an UST system, at least thirty days before starting installation. The notice must be provided using the applicable form provided by the department. The department must also be notified of changes to the planned start date at least three business days before starting installation.¹³⁰
- (2) Deadline for completion.** The installation of an UST system, or a tank or piping run that is part of an UST system, must be completed within ninety days of the department’s receipt of the notification form required under subsection (1) of this section unless a written request for an extension, explaining the reason for the request, is submitted to the department within the ninety days.
- (3) Emergency replacement.** For emergency replacements of an UST system, or a tank or piping run that is part of an UST system, owners and operators shall notify the department within seven days after completing installation. A replacement constitutes an emergency if:

 - (a) There is a confirmed release from an operating UST system;¹³¹
 - (b) The system is located at an operating UST facility (such as a hospital); and
 - (c) The system is necessary for the normal operation of the facility.
- (4) Installation.** An UST system or UST system component must be installed:¹³²

 - (a) By or under the direct supervision of a service provider certified in accordance with Part 9 of this chapter; and
 - (b) In accordance with the manufacturer’s instructions and a code of practice. The following codes of practice may be used to meet this requirement:¹³³

 - (i) American Petroleum Institute, Recommended Practice 1615, “Installation of Underground Petroleum Storage System”;

¹²⁹ This section incorporates provisions from several sections in the current state rule (WAC 173-360-300(4) and (5) and 173-360-200(1), (3), and (5)).

¹³⁰ Added requirements that Ecology must be notified of changes to the planned start date for installing an UST system, or a tank or piping run, at least three business days before starting installation.

¹³¹ For emergency replacements, clarified that a site assessment is not required before installing a new UST system if a release has already been confirmed.

¹³² Consistent with §280.20(d) of the federal rule, clarified that installation requirements apply to all UST system components (not just tanks and piping).

¹³³ Consistent with §280.20(d) and §280.251(d) of the federal rule, updated the codes of practice that may be used to comply with installation requirements.

- (ii) National Fire Protection Association, Standard 30, “Flammable and Combustible Liquids Code,” and Standard 30A, “Code for Motor Fuel Dispensing Facilities and Repair Garages”;
 - (iii) Petroleum Equipment Institute, Recommended Practice 100, “Recommended Practices for Installation of Underground Liquid Storage Systems”; or
 - (iv) For previously deferred UST systems, military construction criteria, such as U.S. Department of Defense, Unified Facilities Criteria 3-460-01, “Design: Petroleum Fuel Facilities.”
- (5) Performance standards.** The installed UST system or UST system component must meet the performance standards in WAC 173-360A-310 or WAC 173-360A-340, as applicable.
- (6) Installation of used tanks.**¹³⁴ A tank that has been installed in the ground and subsequently removed (used tank) may not be re-installed as part of an UST system unless:
- (a) The used tank meets the performance standards in WAC 173-360A-310(1) or WAC 173-360A-340, as applicable;
 - (b) The used tank is recertified for use by the original manufacturer or, if the original manufacturer is unavailable, by another manufacturer of the same tank brand or type; and
 - (c) Proof of recertification is included with the thirty-day notice required under subsection (1) of this section.
- (7) Reporting.** Installations of UST systems and UST system components must be certified and reported in accordance with WAC 173-360A-230(3)(b). For installations of UST systems and tanks, the following documents must be submitted with the applicable service checklist provided by the department:
- (a) Any installation checklist provided by the manufacturer. The checklist must be completed by the service provider;¹³⁵ and
 - (b) An as-built plan showing the location of UST systems, including all tanks, piping, and dispensers, and any adjacent structures. As-built plans must:
 - (i) Contain a north arrow;
 - (ii) Identify and use appropriate and consistent scales to show all required details in sufficient clarity; and
 - (iii) Contain a title, legend of all symbols used, and drafting or origination date.¹³⁶

¹³⁴ Added installation requirements for used tanks to ensure the tanks meet performance standards.

¹³⁵ Clarified that installation checklists provided by the manufacturer must be completed by the service provider and submitted with the checklist provided by the department.

¹³⁶ Clarified minimum requirements for as-built plans.

- (8) **Recordkeeping.** After [effective date of rule], all records relating to the installation of an UST system or an UST system component must be maintained in accordance with WAC 173-360A-240 until the UST system is permanently closed or undergoes a change-in-service.¹³⁷

¹³⁷ Added requirement that installation records must be maintained until the UST system is permanently closed or undergoes a change-in-service, consistent with existing requirement for repairs to UST systems. The requirement is only applicable after effective date of rule.

WAC 173-360A-310 Performance standards for new UST systems and components

Except as provided under WAC 173-360A-330, owners and operators shall ensure new UST systems and new UST system components meet the performance standards of this section.

- (1) Tanks.** To prevent releases due to structural failure or corrosion, tanks must meet the performance standards of this subsection.
- (a) Steel.** Tanks made of steel must be designed and constructed in accordance with the following:
- (i) The compatibility requirements in WAC 173-360A-350;
 - (ii) The cathodic protection requirements in subsection (3) of this section;¹³⁸
 - (iii) The secondary containment requirements in subsection (4) of this section, if applicable;¹³⁹ and
 - (iv) A code of practice. The following codes of practice may be used to meet this requirement:¹⁴⁰
 - (A) Steel Tank Institute, Specification STI-P3®, "Specification and Manual for External Corrosion Protection of Underground Steel Storage Tanks";
 - (B) Steel Tank Institute, Standard F841, "Standard for Dual Wall Underground Steel Storage Tanks";
 - (C) Underwriters Laboratories, Standard 1746, "Standard for External Corrosion Protection Systems for Steel Underground Storage Tanks";
 - (D) Underwriters Laboratories of Canada, Standard S603, "Standard for Steel Underground Tanks for Flammable and Combustible Liquids," Standard S603.1, "Standard for External Corrosion Protection Systems for Steel Underground Tanks for Flammable and Combustible Liquids", and Standard S631, "Standard for Isolating Bushings for Steel Underground Tanks Protected with External Corrosion Protection Systems"; or
 - (E) National Association of Corrosion Engineers International, Standard Practice 0285, "External Corrosion of Underground Storage Tank Systems by Cathodic Protection," and Underwriters Laboratories,

¹³⁸ Consolidated cathodic protection system requirements from WAC 173-360-305(1)(b) and (2)(b) of the current rule in subsection (3) of this section.

¹³⁹ Integrated secondary containment requirements from WAC 173-360-810 of the current rule in subsection (4) of this section.

¹⁴⁰ Consistent §280.20(a)(2) of the federal rule, updated the codes of practice that may be used to comply with the performance requirements for steel tanks.

Standard 58, "Standard for Steel Underground Tanks for Flammable and Combustible Liquids."

- (b) Clad or jacketed steel.**¹⁴¹ Tanks made of steel and clad or jacketed with a non-corrodible material must be designed and constructed in accordance with the following:
- (i) The compatibility requirements in WAC 173-360A-350;
 - (ii) The secondary containment requirements in subsection (4) of this section, if applicable;¹⁴² and
 - (iii) A code of practice. The following codes of practice may be used to meet this requirement:¹⁴³
 - (A) Underwriters Laboratories, Standard 1746, "External Corrosion Protection Systems for Steel Underground Storage Tanks";
 - (B) Steel Tank Institute, Specification F894, "ACT-100® Specification for External Corrosion Protection of FRP Composite Steel Underground Storage Tanks";
 - (C) Steel Tank Institute, Specification F961, "ACT-100U® Specification for External Corrosion Protection of Composite Steel Underground Storage Tanks"; or
 - (D) Steel Tank Institute, Specification F922, "Steel Tank Institute Specification for Permatank®."
- (c) Fiberglass-reinforced plastic.** Tanks made of fiberglass-reinforced plastic must be designed and constructed in accordance with the following:
- (i) The compatibility requirements in WAC 173-360A-350;
 - (ii) The secondary containment requirements in subsection (4) of this section, if applicable;¹⁴⁴ and
 - (iii) A code of practice. The following codes of practice may be used to meet this requirement:¹⁴⁵

¹⁴¹ Consistent with §280.20(a)(3) of the federal rule, changed tank material classifications (from "steel-fiberglass-reinforced-plastic composite tanks" to "steel tanks clad or jacketed with a non-corrodible material").

¹⁴² Integrated secondary containment requirements for tanks from WAC 173-360-810 of the current rule in subsection (4) of this section.

¹⁴³ Consistent §280.20(a)(3) of the federal rule, updated the codes of practice that may be used to comply with the performance requirements for clad or jacketed steel tanks.

¹⁴⁴ Integrated secondary containment requirements for tanks from WAC 173-360-810 of the current rule in subsection (4) of this section.

¹⁴⁵ Consistent §280.20(a)(1) of the federal rule, updated the codes of practice that may be used to comply with the performance requirements for fiberglass-reinforced plastic tanks.

- (A) Underwriters Laboratories, Standard 1316, “Glass-Fiber-Reinforced Plastic Underground Storage Tanks for Petroleum Products, Alcohols, and Alcohol-Gasoline Mixtures”; or
 - (B) Underwriters Laboratories of Canada, Standard S615, “Standard for Reinforced Plastic Underground Tanks for Flammable and Combustible Liquids.”
- (d) Other materials.** Tanks made of materials other than those specified in (a) through (c) of this subsection must be designed and constructed in accordance with the following:
- (i) The compatibility requirements in WAC 173-360A-350;
 - (ii) The secondary containment requirements in subsection (4) of this section, if applicable;¹⁴⁶ and
 - (iii) The tank construction and corrosion protection are determined by the department to prevent releases in a manner that is no less protective of human health and the environment than specified in (a) through (c) of this subsection.
- (2) Piping.** To prevent releases due to structural failure or corrosion, piping must meet the performance standards of this subsection.
- (a) Steel.** Piping made of steel must be designed and constructed in accordance with the following:
- (i) The compatibility requirements in WAC 173-360A-350;
 - (ii) The cathodic protection requirements in subsection (3) of this section, if applicable;¹⁴⁷
 - (iii) The secondary containment requirements in subsection (5) of this section, if applicable;¹⁴⁸ and
 - (iv) A code of practice. The following codes of practice may be used to meet this requirement:¹⁴⁹
 - (A) American Petroleum Institute, Recommended Practice 1632, “Cathodic Protection of Underground Petroleum Storage Tanks and Piping Systems”;

¹⁴⁶ Integrated secondary containment requirements got tanks from WAC 173-360-810 of the current rule in subsection (4) of this section.

¹⁴⁷ Consolidated cathodic protection system requirements from WAC 173-360-305(1)(b) and (2)(b) in subsection (3) of this section.

¹⁴⁸ Integrated secondary containment requirements for piping from WAC 173-360-820 of the current rule in subsection (5) of this section.

¹⁴⁹ Consistent §280.20(b)(2) of the federal rule, updated the codes of practice that may be used to comply with the performance requirements for steel piping.

- (B) Underwriters Laboratories, Standard 971A, “Outline of Investigation for Metallic Underground Fuel Pipe”;
 - (C) Steel Tank Institute, Recommended Practice R892, “Recommended Practice for Corrosion Protection of Underground Piping Networks Associated with Liquid Storage and Dispensing Systems”;
 - (D) National Association of Corrosion Engineers International, Standard Practice 0169, “Control of External Corrosion on Underground or Submerged Metallic Piping Systems”; or
 - (E) National Association of Corrosion Engineers International, Standard Practice 0285, “External Corrosion Control of Underground Storage Tank Systems by Cathodic Protection.”
- (b) Non-corrodible.** Piping made of a non-corrodible material must be designed and constructed in accordance with the following:
- (i) The compatibility requirements in WAC 173-360A-350;
 - (ii) The secondary containment requirements in subsection (5) of this section, if applicable;¹⁵⁰ and
 - (iii) A code of practice. The following codes of practice may be used to meet this requirement:¹⁵¹
 - (A) Underwriters Laboratories, Standard 971, “Nonmetallic Underground Piping for Flammable Liquids”; or
 - (B) Underwriters Laboratories of Canada, Standard S660, “Standard for Nonmetallic Underground Piping for Flammable and Combustible Liquids.”
- (c) Other materials.** Piping made of materials other than those specified in (a) and (b) of this subsection must be designed and constructed in accordance with the following:
- (i) The compatibility requirements in WAC 173-360A-350;
 - (ii) The secondary containment requirements in subsection (5) of this section, if applicable;¹⁵² and

¹⁵⁰ Integrated secondary containment requirements for piping from WAC 173-360-820 of the current rule in subsection (5) of this section.

¹⁵¹ Consistent §280.20(b)(1) of the federal rule, updated the codes of practice that may be used to comply with the performance requirements for non-corrodible piping.

¹⁵² Integrated secondary containment requirements for piping from WAC 173-360-820 of the current rule in subsection (5) of this section.

- (iii) The piping construction and corrosion protection are determined by the department to prevent releases in a manner that is no less protective of human health and the environment than specified in (a) and (b) of this subsection.

(3) Cathodic protection of tanks and piping.¹⁵³

(a) Applicability. The following tanks and piping must be cathodically protected in accordance with the requirements of this subsection:

- (i) Any portion of a tank made of steel that is underground and routinely contains regulated substances; and
- (ii) Any piping made of steel that routinely contains regulated substances and is in contact with the ground.

(b) Performance standards. Tanks and piping must be cathodically protected as follows:

- (i) The tank or piping must be coated with a suitable dielectric material;
- (ii) The tank or piping must be equipped with a factory-installed or field-installed cathodic protection system designed by a corrosion expert; and
- (iii) The cathodic protection system must be designed to allow for the operation and maintenance of the system as specified in WAC 173-360A-430, including testing and rectifier inspections.

(4) Secondary containment of tanks.¹⁵⁴

(a) Applicability. Tanks must be secondarily contained in accordance with the requirements of this subsection if:

- (i) The tank is part of a hazardous substance UST system,¹⁵⁵ or
- (ii) The tank is part of a petroleum UST system, and the tank is installed or replaced after October 1, 2012.

(b) Performance standards. Tanks must be double-walled and designed and constructed to:

- (i) Contain any regulated substances leaking from the primary space (through the inner wall) within the interstitial space until they are detected and removed;
- (ii) Prevent the release of regulated substances into the environment throughout the operational life of the UST system; and

¹⁵³ This subsection incorporates performance standards for cathodic protection systems in WAC 173-360-305(1)(b) and (2)(b) of the current rule.

¹⁵⁴ This subsection incorporates performance standards for secondary containment of tanks in WAC 173-360-810(1) through (2)(a) of the current rule.

¹⁵⁵ Incorporates existing requirement in WAC 173-360-340 of the current rule. All previously installed hazardous substance UST systems are double-walled.

(iii) Allow for interstitial monitoring.

(5) Secondary containment of piping.¹⁵⁶

- (a) Applicability.** Piping must be secondarily contained in accordance with the requirements of this subsection unless:
- (i) The piping is part of an airport hydrant system;¹⁵⁷
 - (ii) The piping is part of an UST system with field-constructed tanks greater than 50,000 gallons;¹⁵⁸
 - (iii) The piping is part of a petroleum UST system, and the piping was installed or replaced on or before October 1, 2012;
 - (iv) The piping does not routinely contain regulated substances, including suction piping meeting the standards in WAC 173-360A-600(1)(b)(i) through (v); or
 - (v) The piping replaces less than fifty percent of a single-walled piping run.
- (b) Replacement.** Unless otherwise directed by the department, if fifty percent or more of a single-walled piping run is replaced after October 1, 2012, then the entire piping run must be replaced.
- (c) Performance standards.** Piping must be double-walled. Containment sumps may also be used as part of the secondary containment and interstitial monitoring system for piping.
- (i) Piping.** Double-walled piping must be designed and constructed to:
 - (A) Contain any regulated substances leaking from the primary space (through the inner wall) within the piping's interstitial space or a containment sump until they are detected and removed;
 - (B) Prevent the release of regulated substances into the environment throughout the operational life of the UST system; and
 - (C) Allow for interstitial monitoring within either the piping's interstitial space or a containment sump.
 - (ii) Containment sumps.** Containment sumps used as part of the secondary containment and interstitial monitoring system for piping must be designed and constructed to:

¹⁵⁶ This subsection incorporates performance standards for secondary containment of piping in WAC 173-360-820(1) through (3)(a) of the current rule.

¹⁵⁷ Consistent with §280.252(a) of the federal rule, added exemption from secondary containment requirements for airport hydrant systems.

¹⁵⁸ Consistent with §280.252(a) of the federal rule, added exemptions from secondary containment requirements for field-constructed tanks > 50,000 gallons.

- (A) Meet the compatibility requirements in WAC 173-360A-350;¹⁵⁹
 - (B) Be liquid-tight on its sides, bottom, and at any penetrations;
 - (C) Allow for visual inspection and access to the components in the sump; and
 - (D) Allow for interstitial monitoring of the piping. The piping's interstitial space must be exposed within the sump. Sensors must be placed within the sump where they are able to detect any leak of regulated substances.
- (6) **Under-dispenser containment.**¹⁶⁰
- (a) **Applicability.** UST systems connected to a dispenser must be equipped with under-dispenser containment meeting the requirements of this subsection if the dispenser, dispenser system, or underground piping connected to the dispenser system is installed or replaced after October 1, 2012.
 - (b) **Performance standards.** Under-dispenser containment must be:
 - (i) Factory-built, if installed or replaced after [effective date of rule];¹⁶¹ and
 - (ii) Designed and constructed to:
 - (A) Meet the compatibility requirements in WAC 173-360A-350;¹⁶²
 - (B) Be liquid-tight on its sides, bottom, and at any penetrations; and
 - (C) Allow for visual inspection and access to the components in the containment system.
- (7) **Spill prevention equipment.**
- (a) **Applicability.** To prevent spilling associated with product transfers, UST systems filled by transfers of more than twenty-five gallons at one time must be equipped with spill prevention equipment meeting the requirements of this subsection.
 - (b) **Performance standards.** Spill prevention equipment must be designed and constructed to:¹⁶³

¹⁵⁹ Clarified that containment sumps used for interstitial monitoring of piping must meet compatibility requirements.

¹⁶⁰ This subsection incorporates WAC 173-340-830(1) and (2).

¹⁶¹ Added requirement that under-dispenser containment (UDC) must be factory-built. The requirement only applies to UDC installed or replaced after effective date of rule.

¹⁶² Clarified that under-dispenser containment must meet compatibility requirements.

¹⁶³ Eliminated Ecology's authority to approve alternative spill prevention equipment that does not meet the specified performance standards. The standards are sufficiently general.

- (i) Meet the compatibility requirements in WAC 173-360A-350;¹⁶⁴
- (ii) Prevent releases when the transfer hose is detached from the fill pipe; and
- (iii) Be liquid-tight on its sides, bottom, and at any penetrations.¹⁶⁵

(8) Overfill prevention equipment.

- (a) Applicability.** To prevent overfilling associated with product transfers, UST systems filled by transfers of more than twenty-five gallons at one time must be equipped with overfill prevention equipment meeting the requirements of this subsection.
- (b) Performance standards.** Overfill prevention equipment must be designed and constructed to:
 - (i) Meet the compatibility requirements in WAC 173-360A-350;¹⁶⁶ and
 - (ii) Do one of the following:
 - (A) Automatically shut off flow into the tank when the tank is no more than ninety-five percent full;
 - (B) Automatically alert the product deliverer when the tank is no more than ninety percent full by restricting flow into the tank or triggering a high-level audible alarm;¹⁶⁷
 - (C) Automatically restrict flow into the tank thirty minutes before overfilling, automatically alert the product deliverer with a high level audible alarm¹⁶⁸ one minute before overfilling, or automatically shut off flow into the tank so that none of the fittings located on top of the tank are exposed to regulated substances due to overfilling; or
 - (D) Prevent overfilling in a manner determined by the department to be no less protective of human health and the environment than specified in (b)(iii)(A) through (C) of this subsection.
- (c) Phase out.** Flow restrictors used in vent lines may not be used to comply with the requirements of this subsection when overfill prevention equipment is installed, replaced, or repaired after **effective date of rule**.¹⁶⁹

¹⁶⁴ Clarified that spill prevention equipment must meet compatibility requirements.

¹⁶⁵ Clarified that spill prevention equipment must be liquid tight to prevent releases. This provision is consistent with the performance standards for under-dispenser containment sumps and containment sumps used for interstitial monitoring of piping.

¹⁶⁶ Clarified that overfill prevention equipment must meet compatibility requirements.

¹⁶⁷ Clarified that alarm must be audible.

¹⁶⁸ Clarified that alarm must be audible.

¹⁶⁹ Consistent with §280.20(c)(3) of the federal rule, specified that flow restrictors in vent lines may no longer be used to comply with overfill prevention requirements when such equipment is installed or replaced after effective

- (9) **Release detection equipment.** Release detection equipment must meet the performance standards in Part 6 of this chapter.¹⁷⁰
- (10) **Codes of practice for previously deferred UST systems.** For previously deferred UST systems, in addition to the codes of practice listed in this section, military construction criteria may be used to meet the requirements of this section, such as U.S. Department of Defense, Unified Facilities Criteria 3-460-01, “Design: Petroleum Fuel Facilities.”¹⁷¹

date of the rule. Unlike the federal rule, also added requirement that flow restrictors in vent lines needing repairs must be replaced with another type of overfill prevention. See also WAC 173-360A-490(3)(b).

¹⁷⁰ Added cross-reference to performance standards for release detection equipment.

¹⁷¹ Consistent §280.251(b) of the federal rule, added codes of practice that may be used by previously deferred UST systems to comply with performance requirements.

WAC 173-360A-320 Upgrade requirements for existing UST systems

By December 22, 1998, owners and operators of existing UST systems were required to meet the performance standards for new UST systems in WAC 173-360A-310 or the upgrade requirements in this section. Existing UST systems not meeting this requirement must be permanently closed in accordance with WAC 173-360A-820 unless the tanks are in compliance and an upgrade is determined to be appropriate by the department.¹⁷² This section does not apply to previously deferred UST systems.

(1) Administration.

- (a) The upgrades specified in this section must be performed by or under the direct supervision of a service provider certified in accordance with Part 9 of this chapter.
- (b) The upgrades specified in this section must be certified and reported in accordance with WAC 173-360A-230(3)(b).
- (c) For UST systems upgraded after [effective date of rule], all records relating the upgrade must be maintained in accordance with WAC 173-360A-240 until the UST system is permanently closed or undergoes a change-in-service.¹⁷³

(2) Upgrades.

- (a) **Corrosion protection of tanks.** Steel tanks must be upgraded to meet one of the following requirements in accordance with a code of practice:
 - (i) **Internal lining.** A tank may be upgraded by internal lining if:
 - (A) The lining is installed in accordance with WAC 173-360A-490; and
 - (B) Within ten years after lining, and every five years thereafter, the lined tank is internally inspected and found to be structurally sound with the lining still performing in accordance with original design specifications, unless cathodic protection is also installed within ten years of lining the tank, as specified in (a)(iii) of this subsection. If the internal lining is no longer performing in accordance with original design specifications and cannot be repaired in accordance with a code of practice, then the lined tank must be permanently closed in accordance with WAC 173-360A-820.¹⁷⁴

¹⁷² This section has been updated to reflect the fact that the deadline for upgrading existing UST systems passed in 1998. Consistent with §280.21 of the federal rule, added requirement that existing UST systems not meeting upgrade requirements must be permanently closed, unless the department determines otherwise on a case-specific basis. To allow upgrades, the tanks must at least be in compliance.

¹⁷³ Added requirement that upgrade records must be maintained until the UST system is permanently closed or undergoes a change-in-service. The requirement is only applicable after effective date of rule. The requirement is consistent with new requirement for installations and the existing requirement for repairs.

¹⁷⁴ Consistent with §280.21(b)(1)(ii) of the federal rule, added requirement that lined tanks must be permanently closed if the lining cannot be repaired.

- (ii) **Cathodic protection.** A tank may be upgraded by cathodic protection if the cathodic protection system meets the requirements in WAC 173-360A-310(3)(b)(ii) and (iii) and the integrity of the tank is ensured using one of the following methods:
- (A) The tank is internally inspected and assessed to ensure that the tank is structurally sound and free of corrosion holes before the cathodic protection system is installed;
 - (B) The tank has been installed or internally lined for less than ten years and is monitored monthly for releases in accordance with WAC 173-360A-630 or 173-360A-655 through 675;
 - (C) The tank has been installed or internally lined for less than ten years and is assessed for corrosion holes by conducting two tightness tests that meet the requirements in WAC 173-360A-635. The first tightness test must be conducted before the cathodic protection system is installed. The second tightness test must be conducted between three and six months following the first operation of the cathodic protection system; or
 - (D) The tank is assessed for corrosion holes by a method that is determined by the department to prevent releases in a manner that is no less protective of human health and the environment than (b)(ii)(A) through (C) of this subsection.
- (iii) **Internal lining combined with cathodic protection.** A tank may be upgraded by both internal lining and cathodic protection if:
- (A) The lining is installed in accordance with WAC 173-360A-490; and
 - (B) The cathodic protection system is installed within ten years of the tank being lined and meets the requirements in WAC 173-360A-310(3)(b)(ii) and (iii).
- (b) **Corrosion protection of tanks – codes of practice.** The following historical codes of practice may have been used to meet the requirements in (a) of this subsection:¹⁷⁵
- (i) American Petroleum Institute, Standard 1631, “Recommended Practice for the Interior Lining of Existing Steel Underground Storage Tanks”;
 - (ii) National Leak Prevention Association, Standard 631, “Spill Prevention, Minimum 10 Year Life Extension of Existing Steel Underground Tanks by Lining without the Addition of Cathodic Protection”;

¹⁷⁵ Consistent with §280.21(b) of the federal rule, maintained list of historical codes of practice for upgrading tanks.

- (iii) National Association of Corrosion Engineers, Recommended Practice 0285, “Control of External Corrosion on Metallic Buried, Partially Buried, or Submerged Liquid Storage Systems”;
 - (iv) American Petroleum Institute, Recommended Practice 1632, “Cathodic Protection of Underground Petroleum Storage Tanks and Piping Systems;” or
 - (v) Steel Tank Institute, Publication F894-91, “Specifications for External Corrosion Protection FRP Composite Underground Steel Storage Tanks.”
- (c) Corrosion protection of piping.** Metal piping routinely containing regulated substances and in contact with the ground must be cathodically protected in accordance with a code of practice and meet the requirements of WAC 173-360A-310(3)(b)(ii) and (iii). The codes of practice listed in WAC 173-360A-310(2)(a) may be used to meet this requirement.
- (d) Secondary containment of tanks and piping.** Tanks and piping that are part of a hazardous substance UST system must meet the secondary containment requirements of WAC 173-360A-310(4) and (5).¹⁷⁶
- (e) Spill and overfill prevention equipment.** UST systems filled by transfers of more than twenty-five gallons at one time must meet the spill and overfill prevention requirements in WAC 173-360A-310(7) and (8).
- (f) Release detection equipment.** Release detection equipment must meet the performance standards in Part 6 of this chapter.¹⁷⁷
- (g) Compatibility.** UST systems must meet the compatibility requirements in WAC 173-360A-350.¹⁷⁸

¹⁷⁶ Incorporated secondary containment requirements for existing hazardous substances UST systems from WAC 173-360-340(1) of the current rule.

¹⁷⁷ Clarified that existing UST systems must meet performance standards for release detection equipment.

¹⁷⁸ Clarified that existing UST systems must meet compatibility requirements.

WAC 173-360A-330 Upgrade requirements for previously deferred UST systems¹⁷⁹

By **[three years after effective date of rule]**, owners and operators shall ensure previously deferred UST systems for which installation commenced on or before **[effective date of rule]** meet the performance standards for new UST systems in WAC 173-360A-310, meet the upgrade requirements in this section, or are permanently closed in accordance with WAC 173-360A-810.

(1) Administration.

- (a) The upgrades specified in this section must be performed by or under the direct supervision of a service provider certified in accordance with Part 9 of this chapter.
- (b) The upgrades specified in this section must be certified and reported in accordance with WAC 173-360A-230(4)(b).
- (c) All records relating the upgrade must be maintained in accordance with WAC 173-360A-240 until the UST system is permanently closed or undergoes a change-in-service.¹⁸⁰

(2) Upgrades.

- (a) Corrosion protection of tanks and piping.** Tanks and piping constructed of metal must be cathodically protected in accordance with a code of practice and meet the following requirements:
 - (i) The cathodic protection system must meet the requirements in WAC 173-360A-310(3)(b)(ii) and (iii); and
 - (ii) Tanks more than ten years old must be assessed to ensure they are structurally sound and free of corrosion holes before a cathodic protection system is installed.
- (b) Corrosion protection of tanks and piping – codes of practice.** The following codes of practice may be used to meet the requirements in (a) of this subsection:
 - (i) National Association of Corrosion Engineers International, Standard Practice 0285, “External Control of Underground Storage Tank Systems by Cathodic Protection”;
 - (ii) National Association of Corrosion Engineers International, Standard Practice 0169, “Control of External Corrosion on Underground or Submerged Metallic Piping Systems”;

¹⁷⁹ Consistent with §§280.251 and 280.252 of the federal rule, added upgrade requirements for previously deferred UST systems. Except as otherwise noted, the requirements are the same as in the federal rule.

¹⁸⁰ Added requirement that upgrade records must be maintained until the UST system is permanently closed or undergoes a change-in-service. The federal rule does not require records of upgrades to be maintained, except for repairs. The requirement is only applicable after effective date of rule. The requirement is consistent with new requirement for installations and the existing requirement for repairs.

- (iii) National Leak Prevention Association, Standard 631, Chapter C, “Internal Inspection of Steel Tanks for Retrofit of Cathodic Protection”; or
 - (iv) American Society for Testing and Materials, Standard G158, “Standard Guide for Three Methods of Assessing Buried Steel Tanks.”
- (c) **Spill and overfill prevention equipment.** UST systems filled by transfers of more than twenty-five gallons at one time must meet the spill and overfill prevention requirements in WAC 173-360A-310(7) and (8).
- (d) **Release detection equipment.** Release detection equipment must meet the performance standards in Part 6 of this chapter.
- (e) **Compatibility.** UST systems must meet the compatibility requirements in WAC 173-360A-350.

WAC 173-360A-340 Performance standards for partially exempt UST systems

Owners and operators shall ensure partially exempt UST systems meet the performance standards of this section.

- (1) **Performance standards.** Partially exempt UST systems must:
- (a) Prevent releases due to corrosion or structural failure for the operational life of the system;
 - (b) Be cathodically protected against corrosion, constructed of non-corrodible material, steel-clad with a non-corrodible material, or designed in a manner to prevent the release or threatened release of any regulated substance stored in the system; and
 - (c) Be constructed or lined with material that is compatible with the regulated substance stored in the system.
- (2) **Guidance.**¹⁸¹ The performance standards in WAC 173-360A-310 for new UST systems and the following codes of practice may be used as guidance for complying with this section:
- (a) National Association of Corrosion Engineers International, Standard Practice 0285, “External Corrosion Control of Underground Storage Tank Systems by Cathodic Protection”;
 - (b) National Association of Corrosion Engineers International, Standard Practice 0169, “Control of External Corrosion on Underground or Submerged Metallic Piping Systems”;
 - (c) American Petroleum Institute, Recommended Practice 1632, “Cathodic Protection of Underground Petroleum Storage Tanks and Piping Systems”; or
 - (d) Steel Tank Institute, Recommended Practice R892, “Recommended Practice for Corrosion Protection of Underground Piping Networks Associated with Liquid Storage and Dispensing Systems.”

¹⁸¹ Consistent with §280.11 of the federal rule, updated the codes of practice that may be used as guidance for complying with performance standards. Also continue to allow performance standards for new UST systems to be used as guidance.

WAC 173-360A-350 Compatibility requirements for UST systems¹⁸²

Owners and operators shall ensure that all UST system components are made of or lined with materials that are compatible with the regulated substances stored in the UST system.

- (1) Demonstration.** Owners and operators of UST systems storing regulated substances containing greater than ten percent ethanol or twenty percent biodiesel shall demonstrate compatibility of the UST system components (including tanks, piping, containment sumps, pumping equipment, release detection equipment, spill prevention equipment, and overfill prevention equipment). Owners and operators may demonstrate compatibility by:

 - (a) Certification or listing of equipment or components by a nationally recognized, independent testing laboratory for use with the regulated substance stored;
 - (b) Equipment or component manufacturer approval. The manufacturer's approval must be in writing, indicate an affirmative statement of compatibility, specify the range of biofuel blends the equipment or component is compatible with, and be from the equipment or component manufacturer; or
 - (c) Using another option determined by the department to be no less protective of human health and the environment than the options specified in (a) or (b) of this subsection.
- (2) Recordkeeping.** All records documenting compliance with subsection (1) of this section must be maintained in accordance with WAC 173-360A-240 until the UST system is permanently closed or undergoes a change-in-service¹⁸³
- (3) Guidance.** The following code of practice may be used as guidance for complying with this section: American Petroleum Institute, Recommended Practice 1626, "Storing and Handling Ethanol and Gasoline-Ethanol Blends at Distribution Terminals and Filling Stations."

¹⁸² Consistent with §280.32 of the federal rule, added compatibility demonstration requirements for UST systems storing regulated substances containing greater than ten percent ethanol or twenty percent biodiesel. Except as otherwise noted, the requirements are the same as in the federal rule.

¹⁸³ Specified that records must be maintained "until the system is permanently closed or undergoes a change-in-service." This is consistent with the new recordkeeping requirements for installations and upgrades, and the existing requirements for repairs. The federal rule requires such records to be maintained "for as long as system used to store the regulated substance."

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Part 4: Operation and Maintenance

Crosswalk of Sections

TOPIC	NEW RULE §	CURRENT RULE §	FEDERAL RULE §
Operation and maintenance	Part 4	In Parts 1, 2, 3	In Subparts B, C, K
Transfer of regulated substances – owners and operators	400	130(4), (5), (7) 315	--
Transfer of regulated substances – product deliverers and waste oil collectors	405	130(4), (5), (6)	--
Changes in regulated substances	410	200(6) 323	32(a), (b)
Operation and maintenance walkthrough inspections	420	--	36 252(c)
Operation and maintenance of corrosion protection	430	320	31
Operation and maintenance of internal linings	440	310(2), (5)	21(b)
Operation and maintenance of containment sumps	450	--	35(a)(1), (b), (c)
Operation and maintenance of spill prevention equipment	460	--	35(a)(1), (b), (c)
Operation and maintenance of overfill prevention equipment	470	--	35(a)(2), (b), (c)
Operation and maintenance of release detection equipment	480	--	40(a)(3) 45(b)(1), (c)
Repairs of UST systems	490	325	33

WAC 173-360A-400 Transfer of regulated substances – owners and operators

Owners and operators shall ensure delivery of regulated substances to UST systems and withdrawal of regulated substances from waste oil UST systems are authorized and do not result in spills or overfills.

- (1) Authority to deliver or deposit.** Without the prior written authorization of the department, owners and operators may not accept the delivery or deposit of regulated substances into an UST system if:
- (a) The owners and operators do not have a valid and current license to operate the UST system (WAC 173-360A-200(1));¹⁸⁴
 - (b) A valid facility compliance tag is not properly displayed at the UST facility where the UST system is located (WAC 173-360A-220(1) and 173-360A-280(4));
 - (c) A red tag is attached to the fill pipe of the UST system (WAC 173-360A-280(4)); or
 - (d) A release from the UST system has been confirmed and the system has not been repaired (WAC 173-360A-750).
- (2) Authority to withdraw waste oil.** Without the prior written authorization of the department, owners and operators may not allow the withdrawal of regulated substances from a waste oil UST system if:
- (a) The owners and operators do not have a valid and current license to operate the UST system (WAC 173-360A-200(1));
 - (b) A valid facility compliance tag is not properly displayed at the UST facility where the UST system is located (WAC 173-360A-220(1) and 173-360A-280(4)); or
 - (c) A red tag is attached to the fill pipe of the UST system (WAC 173-360A-280(4)).
- (3) Spill and overfill control.** To prevent spills and overfills during the transfer of regulated substances into an UST system, owners and operators shall ensure that:
- (a) Before the transfer, the volume available in a tank is greater than the volume of regulated substances to be transferred into the tank;
 - (b) During the transfer, the transfer operation is monitored constantly; and
 - (c) The transfer is performed in accordance with a code of practice. The following codes of practice may be used to meet this requirement:
 - (i) National Fire Protection Association, Standard 385, “Standard for Tank Vehicles for Flammable and Combustible Liquids”;
 - (ii) American Petroleum Institute, Recommended Practice 1007, “Loading and Unloading of MC 306/DOT 406 Cargo Tank Motor Vehicles”;

¹⁸⁴ Incorporated changes to licensing provisions in RCW 90.76.020.

(iii) American Petroleum Institute, Recommended Practice 1621, "Bulk Liquid Stock Control at Retail Outlets."¹⁸⁵

(4) Reporting spills and overfills. Owners and operators shall report, investigate, and clean up any spill or overfill of regulated substances in accordance with WAC 173-360A-740.

¹⁸⁵ Consistent with §280.30 of the federal rule, updated the codes of practice that may be used to comply with spill and overfill control requirements.

WAC 173-360A-405 Transfer of regulated substances – product deliverers and waste oil collectors

Product deliverers shall ensure delivery of regulated substances to UST systems are authorized and do not result in spills or overfills. Waste oil collectors shall ensure withdrawals of regulated substances from waste oil UST systems are authorized.

- (1) Authority to deliver or deposit.** Without the prior written authorization of the department, a product deliverer may not deliver or deposit regulated substances into an UST system if:
 - (a) A valid facility compliance tag is not properly displayed at the UST facility where the UST system is located (WAC 173-360A-220(1) and 173-360A-280(4));
 - (b) A red tag is attached to the fill pipe of the UST system (WAC 173-360A-280(4)); or
 - (c) The product deliverer knows that a release from the UST system has been confirmed and the UST system has not been repaired, regardless of whether a facility compliance tag is properly displayed at the UST facility (WAC 173-360A-750).

- (2) Authority to withdraw waste oil.** Without the prior written authorization of the department, persons may not withdraw regulated substances from a waste oil UST system if:
 - (a) A valid facility compliance tag is not properly displayed at the UST facility where the UST system is located (WAC 173-360A-220(1) and 173-360A-280(4)); or
 - (b) A red tag is attached to the fill pipe of the UST system (WAC 173-360A-280(4)).

- (3) Spill and overfill control.** To prevent spills and overfills during the transfer of regulated substances into an UST system, product deliverers shall comply with the requirements in WAC 173-360A-400(3).¹⁸⁶

- (4) Reporting spills and overfills.** Product deliverers and waste oil collectors shall report any spill or overfill of regulated substances, including into spill prevention equipment, immediately to the owner or operator.¹⁸⁷

¹⁸⁶ Added requirement that product deliverers must comply with spill and overfill control requirements.

¹⁸⁷ Added requirement that product deliverers and waste oil collectors must report any spill or overfill of regulated substances immediately to the owner or operator.

WAC 173-360A-410 Changes in regulated substances

Owners and operators shall notify the department of changes in the regulated substances stored in an UST system and demonstrate the compatibility of the UST system with the regulated substances in accordance with the requirements of this section.

- (1) Except as provided under subsection (2) of this section, owners and operators shall notify the department within thirty days of making any change in the regulated substances stored in an UST system (such as gasoline to diesel) using the applicable form provided by the department.
- (2) When the regulated substance to be stored in an UST system contains greater than ten percent ethanol or twenty percent biodiesel, owners and operators shall:
 - (a) Notify the department at least thirty days before making the change using the applicable form provided by the department;¹⁸⁸ and
 - (b) Demonstrate the compatibility of the UST system with the regulated substances to be stored in accordance with WAC 173-360A-350. The demonstration must be documented on the notification form.

¹⁸⁸ Consistent with §280.32 of the federal rule, changed deadline for notifying Ecology of changes in regulated substances stored in UST system (from 30 days after to 30 days before) when the substances contain greater than ten percent ethanol or twenty percent biodiesel.

WAC 173-360A-420 Operation and maintenance walkthrough inspections¹⁸⁹

Owners and operators shall comply with the periodic walkthrough requirements of this section to ensure UST systems are properly operated and maintained.

(1) Inspections. Operation and maintenance walkthrough inspections must be performed in accordance with the following requirements or a code of practice that provides for comparable inspections. The following code of practice may be used to meet this requirement: Petroleum Equipment Institute, Recommended Practice 900, "Recommended Practices for the Inspection and Maintenance of UST Systems."

(a) At least every thirty days, the following UST system components must be inspected:

(i) Spill prevention equipment. For UST systems receiving deliveries of regulated substances less frequently than every thirty days, the equipment only needs to be checked prior to each delivery. The inspection must include:

- (A) Visually checking for damage;
- (B) Removing any liquid or debris;
- (C) Checking for and removing obstructions in the fill pipe;
- (D) Checking the fill cap to make sure it is securely on the fill pipe; and
- (E) For double-walled spill prevention equipment with interstitial monitoring, checking for a leak in the interstitial area; and

(ii) Release detection equipment. The inspection must include:

- (A) Checking to make sure the release detection equipment is operating with no alarms or other unusual operating conditions present; and
- (B) Ensuring records of release detection testing are reviewed and current.

(b) At least annually, the following equipment must be checked:

(i) Containment sumps. The inspection must include:

- (A) Visually checking for damage, leaks to the containment area, or releases to the environment;
- (B) Removing any liquid (in contained sumps) or debris; and
- (C) For double-walled containment sumps with interstitial monitoring, checking for a leak in the interstitial area, and

¹⁸⁹ Consistent with §280.36 and §280.252(c) of the federal rule, added walkthrough inspection requirements. Except as otherwise noted, the requirements are the same as in the federal rule.

- (ii) Hand-held release detection equipment. The inspection must confirm the operability and serviceability of devices such as tank gauge sticks and groundwater bailers.
 - (c) For airport hydrant systems, the following additional areas must be checked at least every thirty days, if confined spaced entry is not required under 29 CFR Part 1910 according to the Occupational Safety and Health Administration, or at least annually if confined spaced entry is required:
 - (i) Hydrant pits. The inspection must include:
 - (A) Visually checking for any damage;
 - (B) Removing any liquid or debris; and
 - (C) Checking for any leaks; and
 - (ii) Hydrant piping vaults. The inspection must include checking for any hydrant piping leaks.
- (2) Repairs.** Any UST system component that is not operating properly must be repaired in accordance with WAC 173-360A-490 or replaced in accordance with WAC 173-360A-300.
- (3) Documentation.** Operation and maintenance walkthrough inspections must be documented in a checklist provided by the department or the code of practice used to perform the inspection.¹⁹⁰ The following information must be included in the checklist:
 - (a) A list of each UST system component inspected;
 - (b) For each component inspected, whether the component needed action taken to correct an issue; and
 - (c) For each component needing action taken to correct an issue, a description of the actions taken.
- (4) Recordkeeping.** Records of operation and maintenance walkthrough inspections must be maintained in accordance with WAC 173-360A-240 for at least three years.¹⁹¹ If spill prevention equipment is checked less frequently than every thirty days due to infrequent deliveries, delivery records must also be maintained in accordance with this requirement.
- (5) Compliance dates.** Owners and operators shall begin the periodic walkthrough inspections required in this section by **one year after effective date of rule**, except as provided for periodic

¹⁹⁰ Specified that forms used to document walkthrough inspections must be provided by Ecology or in the code of practice used to perform inspection. The federal rule does not specify.

¹⁹¹ Specified that records of walkthrough inspections must be maintained for three years. The federal rule specifies one year.

monitoring of double-walled containment sumps used for interstitial monitoring and spill prevention equipment under WAC 173-360A-450(5)(b) and 173-360A-460(5)(b).¹⁹²

¹⁹² Specified that walkthrough inspections must begin one year after effective date. The federal rule specifies three years after effective date.

WAC 173-360A-430 Operation and maintenance of corrosion protection

Owners and operators of UST systems with corrosion protection shall comply with the requirements of this section to ensure the equipment is operating properly and will prevent releases to the environment due to corrosion until the UST system is permanently closed or undergoes a change-in-service.

- (1) Corrosion protection systems.** All corrosion protection systems must be operated and maintained to continuously provide corrosion protection to the metal components of that portion of the tank and piping that routinely contain regulated substances and are continuously in contact with the ground or an electrolyte.¹⁹³
- (2) Testing of cathodic protection systems.** Upon installation or repair, between one and six months after installation or repair, and every three years thereafter, cathodic protection systems must be tested as follows to ensure they are operating properly.
 - (a) Performance.** Cathodic protection tests must be performed:
 - (i) By or under the direct supervision of a service provider certified in accordance with Part 9 of this chapter; and
 - (ii) In accordance with a code of practice. The following codes of practice may be used to meet this requirement:¹⁹⁴
 - (A) National Association of Corrosion Engineers International, Test Method TM0101, "Measurement Techniques Related to Criteria for Cathodic Protection of Underground Storage Tank Systems";
 - (B) National Association of Corrosion Engineers International, Test Method TM0497, "Measurement Techniques Related to Criteria for Cathodic Protection on Underground or Submerged Metallic Piping Systems";
 - (C) Steel Tank Institute, Recommended Practice R051, "Cathodic Protection Testing Procedures for STI-P3R USTs";
 - (D) National Association of Corrosion Engineers International, Standard Practice 0285, "External Control of Underground Storage Tank Systems by Cathodic Protection"; or
 - (E) National Association of Corrosion Engineers International, Standard Practice 0169, "Control of External Corrosion on Underground or Submerged Metallic Piping Systems."

¹⁹³ Clarified that CP systems must protect any portion of the tank and piping that is continuously in contact with an electrolyte.

¹⁹⁴ Consistent with §280.31 of the federal rule, updated the codes of practice that may be used to comply with cathodic protection testing requirements.

- (b) Repairs.** Cathodic protection systems that are not operating properly must be recalibrated or repaired in accordance with WAC 173-360A-490 or replaced in accordance with WAC 173-360A-300.
 - (c) Reporting.** Cathodic protection tests must be certified and reported in accordance with WAC 173-360A-230(3)(b).
 - (d) Recordkeeping.** Records of cathodic protection tests must be maintained in accordance with WAC 173-360A-240 for at least six years.¹⁹⁵
- (3) Inspections of impressed current cathodic protection systems.** At least every sixty days, impressed current cathodic protection systems must be inspected to ensure the rectifier is on and the equipment is operating properly.
- (a) Performance.** Rectifier inspections must include checking whether the rectifier is turned on and whether the voltage and amperage readings are within the ranges specified during the last cathodic protection test.¹⁹⁶
 - (b) Repairs.** Cathodic protection systems must be repaired in accordance with WAC 173-360A-490 or replaced in accordance with WAC 173-360A-300 if:

 - (i) The rectifier is not functioning; or
 - (ii) The voltage or amperage readings are not within the range specified for the system, unless a cathodic protection tester or corrosion expert determines that a repair is not necessary.¹⁹⁷
 - (c) Documentation.** Rectifier inspections must be documented on the checklist provided by the department or on another document that includes the same information.¹⁹⁸
 - (d) Recordkeeping.** Records of rectifier inspections must be maintained in accordance with WAC 173-360A-240 for at least three years.¹⁹⁹

¹⁹⁵ Changed record retention for cathodic protection tests from last two tests, which is the same as the federal rule, to six years (two compliance inspections).

¹⁹⁶ Clarified requirements for performing rectifier inspections.

¹⁹⁷ Clarified when rectifier must be repaired.

¹⁹⁸ Clarified how rectifier inspections must be documented.

¹⁹⁹ Changed record retention for rectifier inspections from last three inspections, which is the same as the federal rule, to three years (one compliance inspection).

WAC 173-360A-440 Operation and maintenance of internal linings

Owners and operators of UST systems with internal linings used to meet the upgrade requirements in WAC 173-360A-320 shall comply with the requirements of this section.

- (1) Inspections.** Within ten years after lining and every five years thereafter, lined tanks must be internally inspected to determine whether the tanks remain structurally sound and the linings are still performing in accordance with the original design specifications. Internal inspections must be performed:

 - (a) By or under the direct supervision of a service provider certified in accordance with Part 9 of this chapter; and
 - (b) In accordance with a code of practice. The following codes of practice may be used to meet this requirement:²⁰⁰

 - (i) American Petroleum Institute, Recommended Practice 1631, “Interior Lining and Periodic Inspection of Underground Storage Tanks”;
 - (ii) National Leak Prevention Association, Standard 631, Chapter B, “Future Internal Inspection Requirements for Lined Tanks”; or
 - (iii) Ken Wilcox Associates, Recommended Practice, “Recommended Practice for Inspecting Buried Lined Steel Tanks Using a Video Camera.”
- (2) Repairs.** Lined tanks failing an internal inspection must be repaired in accordance with WAC 173-360A-490. Lined tanks that cannot be repaired in accordance with a code of practice must be permanently closed in accordance with WAC 173-360A-810.²⁰¹
- (3) Reporting.** Internal inspections of lined tanks must be certified and reported in accordance with WAC 173-360A-230(3)(b).
- (4) Recordkeeping.** Records of internal inspections of lined tanks must be maintained in accordance with WAC 173-360A-490 until the UST system is permanently closed or undergoes a change-in-service.²⁰²

²⁰⁰ Consistent with §280.21(b) of the federal rule, updated the codes of practice that may be used to comply with internal inspection requirements for lined tanks.

²⁰¹ Consistent with §280.21(b)(1)(ii) of the federal rule, added requirement that lined tanks must be permanently closed if the lining cannot be repaired.

²⁰² Clarified record retention requirement for internal inspections of lined tanks (same as for repairs).

WAC 173-360A-450 Operation and maintenance of containment sumps²⁰³

Owners and operators of UST systems with containment sumps shall comply with the requirements of this section and the walkthrough inspection requirements in WAC 173-360A-420 to ensure the equipment is operating properly and will prevent releases to the environment.

- (1) Periodic monitoring or testing.** Containment sumps used for interstitial monitoring of piping must meet one of the following requirements:
- (a) The containment sump is double-walled and the integrity of both walls is monitored at least annually as part of the walkthrough inspection (WAC 173-360A-420(1)(b)(i)(C)). If monitoring is discontinued, the containment sump must be tightness tested in accordance with (b) of this subsection within thirty days; or
 - (b) The containment sump is tightness tested at least every three years to ensure it is liquid tight. The tightness test must be performed:
 - (i) By or under the direct supervision of a service provider certified in accordance with Part 9 of this chapter;²⁰⁴ and
 - (ii) Using a vacuum, pressure, or liquid test (including a low level liquid test) performed in accordance with:
 - (A) The manufacturer's instructions;
 - (B) A code of practice. The following code of practice may be used to meet this requirement: Petroleum Equipment Institute, Recommended Practice 1200, "Recommended Practices for the Testing and Verification of Spill, Overfill, leak Detection and Secondary Containment Equipment at UST Facilities;" or
 - (C) Requirements determined by the department to be no less protective of human health and the environment.²⁰⁵
- (2) Repairs.** Containment sumps that are not operating properly must be repaired in accordance with WAC 173-360A-490 or replaced in accordance with WAC 173-360A-300.
- (3) Reporting.** Tightness tests of containment sumps must be certified and reported in accordance with WAC 173-360A-230(3)(b).²⁰⁶

²⁰³ Consistent with §280.35 of the federal rule, added operation and maintenance requirements for containment sumps used for interstitial monitoring of piping. Except as otherwise noted, the requirements are the same as in the federal rule.

²⁰⁴ Specified that tightness tests of containment sumps must be performed by certified service provider. The federal rule does not specify who may perform tests.

²⁰⁵ Clarified that low liquid level integrity tests may be used to meet the testing requirements for containment sumps, as approved by EPA under the federal rule.

²⁰⁶ Specified that tightness tests of containment sumps must be reported. The federal rule does not require reporting.

- (4) **Recordkeeping.** Records of periodic monitoring and tightness tests of containment sumps must be maintained in accordance with WAC 173-360A-240.
- (a) Records of periodic monitoring must demonstrate that the sumps are double-walled and the integrity of both walls is periodically monitored. The records must be maintained for at least three years.²⁰⁷
 - (b) Records of tightness tests must be maintained for at least six years.²⁰⁸
- (5) **Compliance dates.** Owners and operators shall begin the periodic monitoring or tightness testing of containment sumps required under this section by the following dates:
- (a) For UST systems installed after [effective date of rule], upon installation; and
 - (b) For UST systems installed on or before [effective date of rule]:²⁰⁹
 - (i) By [two years after effective date of rule], if the identification number on the facility compliance tag for the UST facility where the system is located is an even number; and
 - (ii) By [three years after effective date of rule], if the identification number on the facility compliance tag for the UST facility where the system is located is an odd number or if the UST facility does not have a facility compliance tag.

²⁰⁷ Specified that records of periodic monitoring of containment sumps must be retained for three years (one inspection cycle). The federal rule requires such records to be maintained for as long as the equipment is periodically monitored.

²⁰⁸ Specified that records of tightness tests of containment sumps must be retained for six years (two inspection cycles). The federal rule requires such records to be maintained for three years.

²⁰⁹ Specified that compliance dates for previously installed UST systems depends on whether the identification number on the facility compliance tag is even (two years after effective date) or odd (three years after effective date). The federal rule requires compliance within three years. This is intended to avoid having the deadline for testing and inspections by service providers of all previously installed UST systems (more than 9,000) be at the same time, which has been an implementation problem in other states.

WAC 173-360A-460 Operation and maintenance of spill prevention equipment²¹⁰

Owners and operators of UST systems with spill prevention equipment shall comply with the requirements of this section and the walkthrough inspection requirements in WAC 173-360A-420 to ensure the equipment is operating properly and will prevent releases to the environment.

- (1) Periodic monitoring or testing.** Spill prevention equipment must meet one of the following requirements:
 - (a) The equipment is double-walled and the integrity of both walls is monitored at least every thirty days, or prior to delivery if less frequent, as part of the walkthrough inspection (WAC 173-360A-420(1)(a)(i)(E)). If monitoring is discontinued, the equipment must be tightness tested in accordance with (b) of this subsection within thirty days; or
 - (b) The equipment is tightness tested at least every three years. The tightness test must be performed:
 - (i) By or under the direct supervision of a service provider certified in accordance with Part 9 of this chapter;²¹¹ and
 - (ii) Using a vacuum, pressure, or liquid test performed in accordance with manufacturer's instructions or a code of practice. The following code of practice may be used to meet this requirement: Petroleum Equipment Institute, Recommended Practice 1200, "Recommended Practices for the Testing and Verification of Spill, Overfill, Leak Detection and Secondary Containment Equipment at UST Facilities."
- (2) Repairs.** Spill prevention equipment that is not operating properly must be repaired in accordance with WAC 173-360A-490 or replaced in accordance with WAC 173-360A-300.
- (3) Reporting.** Tightness tests of spill prevention equipment must be certified and reported in accordance with WAC 173-360A-230(3)(b).²¹²
- (4) Recordkeeping.** Records of periodic monitoring and tightness tests of spill prevention equipment must be maintained in accordance with WAC 173-360A-240.

²¹⁰ Consistent with §280.35 of the federal rule, added operation and maintenance requirements for spill prevention equipment. Except as otherwise noted, the requirements are the same as in the federal rule.

²¹¹ Specified that tightness tests of spill prevention equipment must be performed by a certified service provider. The federal rule does not specify who may perform the tests.

²¹² Specified that tightness tests of spill prevention equipment must be reported. The federal rule does not require reporting.

- (a) Records of periodic monitoring must demonstrate that the equipment is double-walled and the integrity of both walls is periodically monitored. The records must be maintained for at least three years.²¹³
 - (b) Records of tightness tests must be maintained for at least six years.²¹⁴
- (5) Compliance dates.** Owners and operators shall begin the periodic monitoring or tightness testing of spill prevention equipment required under this section by the following dates:
- (a) For UST systems installed after [effective date of rule], upon installation; and
 - (b) For UST systems installed on or before [effective date of rule].²¹⁵
 - (i) By [two years after effective date of rule], if the identification number on the facility compliance tag for the UST facility where the system is located is an even number; and
 - (ii) By [three years after effective date of rule], if the identification number on the facility compliance tag for the UST facility where the system is located is an odd number or if the UST facility does not have a facility compliance tag.

²¹³ Specified that records of periodic monitoring of spill prevention equipment must be retained for three years (one inspection cycle). The federal rule requires such records to be maintained for as long as the equipment is periodically monitored.

²¹⁴ Specified that records of tightness tests of spill prevention equipment must be retained for six years (two inspection cycles). The federal rule requires such records to be maintained for three years.

²¹⁵ Specified that compliance dates for previously installed UST systems depends on whether the identification number on the facility compliance tag is even (two years after effective date) or odd (three years after effective date). The federal rule requires compliance within three years. This is intended to avoid having the deadline for testing and inspections by service providers of all previously installed UST systems (more than 9,000) be at the same time, which has been an implementation problem in other states.

WAC 173-360A-470 Operation and maintenance of overfill prevention equipment²¹⁶

Owners and operators of UST systems with overfill prevention equipment shall comply with the requirements of this section to ensure the equipment is operating properly and will prevent releases to the environment.

- (1) Inspections.** Overfill prevention equipment must be inspected at least once every three years. At a minimum, the inspection must ensure that the equipment is set to activate at the applicable level specified in WAC 173-360A-320(8) and will activate when regulated substances reach that level. Inspections must be performed:

 - (a) By or under the direct supervision of a service provider certified in accordance with Part 9 of this chapter;²¹⁷ and
 - (b) In accordance with the manufacturer's instructions or a code of practice. The following code of practice may be used to meet this requirement: Petroleum Equipment Institute, Recommended Practice 1200, "Recommended Practices for the Testing and Verification of Spill, Overfill, Leak Detection and Secondary Containment Equipment at UST Facilities."
- (2) Repairs.** Overfill prevention equipment that is not operating properly must be repaired in accordance with WAC 173-360A-490 or replaced in accordance with WAC 173-360A-300.
- (3) Reporting.** Overfill prevention equipment inspections must be certified and reported in accordance with WAC 173-360A-230(3)(b).²¹⁸
- (4) Recordkeeping.** Records of overfill prevention equipment inspections must be maintained in accordance with WAC 173-360A-240 for at least six years.²¹⁹
- (5) Compliance dates.** Owners and operators shall begin the overfill prevention equipment inspections required under this section by the following dates:

 - (a) For UST systems installed after [effective date of rule], upon installation; and
 - (b) For UST systems installed on or before [effective date of rule].²²⁰

²¹⁶ Consistent with §280.35 of the federal rule, added operation and maintenance requirements of overfill prevention equipment. Except as otherwise noted, the requirements are the same as in the federal rule.

²¹⁷ Specified that inspections of overfill prevention equipment must be performed by a certified service provider. The federal rule does not specify who may perform the inspections.

²¹⁸ Specified that inspections of overfill prevention equipment must be reported. The federal rule does not require reporting.

²¹⁹ Specified that records of overfill prevention equipment must be retained for six years (two inspection cycles). The federal rule requires such records to be maintained for three years.

²²⁰ Specified that compliance dates for previously installed UST systems depends on whether the identification number on the facility compliance tag is even (two years after effective date) or odd (three years after effective date). The federal rule requires compliance within three years. This is intended to avoid having the deadline for testing and inspections by service providers of all previously installed UST systems (more than 9,000) be at the same time, which has been an implementation problem in other states.

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- (i) By **[two years after effective date of rule]**, if the identification number on the facility compliance tag for the UST facility where the system is located is an even number; and
- (ii) By **[three years after effective date of rule]**, if the identification number on the facility compliance tag for the UST facility where the system is located is an odd number or if the UST facility does not have a facility compliance tag.

WAC 173-360A-480 Operation and maintenance of release detection equipment²²¹

Owners and operators shall operate and maintain release detection equipment in accordance with the requirements of this section and the walkthrough inspection requirements in WAC 173-360A-420 to ensure the equipment is operating properly and will detect leaks from tanks and piping.

- (1) General.** Release detection equipment must be operated and maintained in accordance with the manufacturer's instructions or a code of practice. The following code of practice may be used to meet this requirement: Petroleum Equipment Institute, Recommended Practice 1200, "Recommended Practices for the Testing and Verification of Spill, Overfill, Leak Detection and Secondary Containment Equipment at UST Facilities."
- (2) Testing.** Release detection equipment that is electronic or mechanical must be tested at least annually.
 - (a) Performance.** Tests of release detection equipment must be performed:
 - (i) By or under the direct supervision of a service provider certified in accordance with Part 9 of this chapter;²²² and
 - (ii) In accordance with the manufacturer's instructions or a code of practice. The code of practice specified in subsection (1) of this section may be used to meet this requirement.
 - (b) Minimum.** Tests of release detection equipment must include the following, as applicable to the UST system:
 - (i) Automatic tank gauges and other controllers: test proper operation of alarms, verify system configuration, and test battery backups;
 - (ii) Probes and sensors: inspect for residual buildup, ensure floats move freely, ensure shafts are not damaged, ensure cables are free of kinks and breaks, and test alarm operability and communication with controller;
 - (iii) Automatic line leak detectors: test operation to determine whether meet performance standards in WAC 173-360A-640 by simulating a leak;
 - (iv) Vacuum pumps and pressure gauges: ensure proper communication with sensors and controller; and
 - (v) Hand-held electronic sampling equipment associated with groundwater and vapor monitoring: ensure proper operation.

²²¹ Consistent with §280.40(a)(3) and §280.45(b)(1) and (c) of the federal rule, added operation and maintenance requirements for release detection equipment. Except as otherwise noted, the requirements are the same as in the federal rule.

²²² Specified that tests of release detection equipment must be performed by a certified service provider. The federal rule does not specify who may perform the tests.

- (3) **Repairs.** Release detection equipment that is not operating properly must be recalibrated or repaired in accordance with WAC 173-360A-490 or replaced in accordance with WAC 173-360A-300.
- (4) **Reporting.** Tests of release detection equipment must be certified and reported in accordance with WAC 173-360A-230(3)(b).²²³ The following must be documented in the checklist:
- (a) List of each component tested;
 - (b) For each component tested, whether the component needed action to correct an issue; and
 - (c) For each component needing action to correct an issue, a description of the actions taken.
- (5) **Recordkeeping.** Records of operation and maintenance of release detection equipment, including any tests required under this section, must be maintained in accordance with WAC 173-360A-240 for at least three years. Any schedules of required calibration and maintenance provided by the equipment manufacturer must be maintained for as long as the equipment is used.²²⁴
- (6) **Compliance date.** Owners and operators shall begin the testing required under this section by [three years after effective date of rule].

²²³ Specified that tests of release detection equipment must be reported. The federal rule does not require reporting.

²²⁴ Specified that schedules of required calibration and maintenance of release detection equipment must be maintained for as long as the equipment is used. The federal rule requires such records to be maintained for five years.

WAC 173-360A-490 Repairs of UST systems

Owners and operators shall ensure that UST system components that do not meet applicable performance standards and upgrade requirements or that are not operating properly are repaired or replaced.²²⁵ Owners and operators shall ensure that repairs of UST system components are performed in accordance with the requirements of this section and will prevent releases due to structural failure or corrosion as long as the UST system is used to store regulated substances.

(1) Performance of repairs. Repairs must be performed:

- (a) By or under the direct supervision of a service provider certified in accordance with Part 9 of this chapter; and
- (b) In accordance with the manufacturer's instructions or a code of practice. The following code of practice may be used to meet this requirement:²²⁶
 - (i) National Fire Protection Association, Standard 30, "Flammable and Combustible Liquids Code";
 - (ii) American Petroleum Institute, Recommended Practice 2200, "Repairing Crude Oil, Liquefied Petroleum Gas, and Product Pipelines";
 - (iii) American Petroleum Institute, Recommended Practice 1631, "Interior Lining and Periodic Inspection of Underground Storage Tanks";
 - (iv) National Fire Protection Association, Standard 326, "Standard for the Safeguarding of Tanks and Containers for Entry, Cleaning, or Repair";
 - (v) National Leak Prevention Association, Standard 631, Chapter A, "Entry, Cleaning, Interior Inspection, Repair, and Lining of Underground Storage Tanks";
 - (vi) Steel Tank Institute, Recommended Practice R972, "Recommended Practice for the Addition of Supplemental Anodes to STI-P3R Tanks";
 - (vii) National Association of Corrosion Engineers International, Standard Practice 0285, "External Control of Underground Storage Tank Systems by Cathodic Protection"; or
 - (viii) Fiberglass Tank and Pipe Institute, Recommended Practice T-95-02, "Remanufacturing of Fiberglass Reinforced Plastic (FRP) Underground Storage Tanks."

(2) Standards for repairs. Repaired UST system components must meet the applicable performance standards and upgrade requirements in Part 3 of this chapter.

²²⁵ Consistent with definition of "repair" in §280.12 of the federal rule, clarified that "repairs" include any action to restore to proper operating condition any UST system component that is not operating properly.

²²⁶ Consistent with §280.33(a) of the federal rule, updated the codes of practice that may be used to comply with requirements for performing repairs.

(3) Replacement required.

- (a) Metal piping and fittings that have released regulated substances due to corrosion or other damage must be replaced.
- (b) Flow restrictors in vent lines used to comply with overfill prevention requirements in WAC 173-360A-310(8) that do not meet performance standards or are not operating properly must be replaced with another type of overfill prevention (WAC 173-360A-310(8)(c)).²²⁷

(4) Permanent closure required. Tanks upgraded with liners under WAC 173-360A-320(2)(a) must be permanently closed if the lining cannot be repaired in accordance with a code of practice.²²⁸

(5) Tests and inspections. Repaired UST system components must be tested and inspected as specified in this subsection.

- (a) Repaired tanks and piping must be tightness tested as specified in WAC 173-360A-635 and 173-360A-650 within thirty days of the repair unless another test method is used that is determined by the department to be no less protective of human health and the environment.
- (b) Except as provided under (c) of this subsection, the cathodic protection systems of repaired tanks or piping must be tested as specified in WAC 173-360A-330(2) within six months after the repair;
- (c) Repaired cathodic protection systems must be tested as specified in WAC 173-360A-330(2) at the time of the repair and between one and six months after the repair. The cathodically protected tanks or piping must also be tightness tested as specified in WAC 173-360-635 or 173-360-650 within thirty days of the repair.²²⁹
- (d) Repaired secondary containment areas of tanks and piping used for interstitial monitoring must be tightness tested as specified in subsection (6) of this section within thirty days of the repair.²³⁰
- (e) Repaired containment sumps used for interstitial monitoring of piping must be tested as specified in WAC 173-360A-450 within thirty days of the repair.²³¹

²²⁷ Added requirement that flow restrictors in vent lines needing repairs may not be used to comply with the overfill prevention requirements and must be replaced with another type of overfill prevention.

²²⁸ Consistent with §280.21(b)(1)(ii) of the federal rule, added requirement that tanks upgraded with liners must be permanently closed if the lining cannot be repaired.

²²⁹ Added requirement that cathodically protected tanks or piping must be tightness tested if the cathodic protection system was repaired.

²³⁰ Consistent with §280.33(d) of the federal rule, added requirement that repaired secondary containment areas of tanks and piping used for interstitial monitoring must be tightness tested within thirty days of the repair.

²³¹ Consistent with §280.33(d) of the federal rule, added requirement that repaired containment sumps used for interstitial monitoring of piping must be tested within thirty days of the repair.

- (f) Repaired under-dispenser containment sumps must be tested as specified in WAC 173-360A-450 within thirty days of the repair, regardless of whether the sumps are used for interstitial monitoring of piping.²³²
 - (g) Repaired spill prevention equipment must be tested as specified in WAC 173-360A-460 within thirty days of the repair.²³³
 - (h) Repaired overfill prevention equipment must be inspected as specified in WAC 173-360A-470 within thirty days of the repair.²³⁴
 - (i) Repaired electronic or mechanical release detection equipment must be tested as specified in WAC 173-360A-480 within thirty days of the repair.²³⁵
- (6) Testing of secondary containment areas of tanks and piping.** Secondary containment areas of tanks and piping used for interstitial monitoring must be tightness tested in accordance with this subsection.²³⁶
- (a) Performance.** Tightness tests of secondary containment areas of tanks and piping must be performed:
 - (i) By or under the direct supervision of a service provider certified in accordance with Part 9 of this chapter;²³⁷ and
 - (ii) In accordance with the manufacturer’s instructions or a code of practice. The following codes of practice may be used to meet this requirement:
 - (A) Steel Tank Institute Recommended Practice R012, “Recommended Practice for Interstitial Tightness Testing of Existing Underground Double Wall Steel Tanks”;
 - (B) Fiberglass Tank and Pipe Institute Protocol, “Field Test Protocol for Testing the Annular Space of Installed Underground Fiberglass Double and Triple-Wall Tanks with Dry Annular Space”; or

²³² Added requirement that repaired under-dispenser containment sumps must be tightness tested within thirty days of the repair even when they are not used for interstitial monitoring of piping. The federal rule does not require testing upon repair of such sumps.

²³³ Consistent with §280.33(f) of the federal rule, added requirement that repaired spill prevention equipment must be tested within thirty days of the repair.

²³⁴ Consistent with §280.33(f) of the federal rule, added requirement that repaired overfill prevention equipment must be inspected within thirty days of the repair.

²³⁵ Added requirement that electronic or mechanical repaired release detection equipment must be tested within thirty days of the repair. The federal rule does not require such testing upon repair.

²³⁶ Consistent with §280.33(d) of the federal rule, added requirements for tightness testing repaired secondary containment areas of tanks and piping used for interstitial monitoring. Except as otherwise noted, the requirements are the same as in the federal rule.

²³⁷ Specified that tightness tests of secondary containment areas of tanks and piping must be performed by a certified service provider. The federal rule does not specify who may perform such tests.

- (C) Petroleum Equipment Institute, Recommended Practice 1200, “Recommended Practices for the Testing and Verification of Spill, Overfill, leak Detection and Secondary Containment Equipment at UST Facilities.
- (b) **Reporting.** Tightness tests of secondary containment areas of tanks and piping must be certified and reported in accordance with WAC 173-360A-230(3)(b).²³⁸
- (c) **Recordkeeping.** Records of tightness tests of secondary containment areas of tanks and piping must be maintained in accordance with WAC 173-360A-240 for at least three years.²³⁹
- (7) **Reporting.** Repairs of UST system components must be certified and reported in accordance with WAC 173-360A-230(3)(b).
- (8) **Recordkeeping.** Records of repairs of UST system components must be maintained in accordance with WAC 173-360A-240 until the UST system is permanently closed or undergoes a change-in-service.

²³⁸ Specified that tightness tests of secondary containment areas of tanks and piping must be reported. The federal rule does not require reporting.

²³⁹ Specified that records of tightness tests of secondary containment areas of tanks and piping must be retained for three years (one inspection cycle). The federal rule does not clearly specify record retention for such tests.

Part 5: Operator Training

Crosswalk of Sections

TOPIC	AMENDED RULE §	CURRENT RULE §	FEDERAL RULE §
Operator training	Part 5	Part 7	Subpart J
Purpose and applicability	500	700	240
Designation of operators	510	710	241
Timing of operator training	520	720	243
Training requirements for operators	530	730	242
Retraining requirements for Class A and Class B operators	540	740	244
Operation and maintenance plans	545	745	--
Emergency response requirements	550	750	--
Documentation and recordkeeping	560	760	245

WAC 173-360A-500 Purpose and applicability

- (1) This part establishes a mandatory operator training program for three distinct classes of individuals who operate and maintain UST systems. The program is designed to prevent and mitigate releases from UST systems by ensuring that those individuals know how to properly operate and maintain those systems and respond to any spills, overfills, leaks, or releases from those systems.
- (2) Owners and operators of an UST system shall continuously comply with the requirements of this part from installation until permanent closure or change-in-service of the UST system, including during any period of temporary closure.

WAC 173-360A-510 Designation of Class A, B, and C operators²⁴⁰

UST system owners and operators shall designate individuals as Class A, Class B, and Class C operators in accordance with the requirements of this section.

- (1) At least one Class A and one Class B operator must be designated for each UST system or group of systems at an UST facility.
- (2) Each individual who meets the definition of Class C operator at an UST facility must be designated as a Class C operator.²⁴¹
- (3) Separate individuals may be designated for each operator class or an individual may be designated to more than one operator class.

²⁴⁰ Consistent with §280.241 of the federal rule, edited section header to help distinguish between “operators” and “Class A, B, and C operators,”

²⁴¹ Consistent with the definition of “Class C operator” in §280.12 of the federal rule, eliminated requirement that a Class C operator must be an employee.

WAC 173-360A-520 Timing of operator training

UST system owners and operators shall ensure that each Class A, Class B, and Class C operator is trained in accordance with the requirements in WAC 173-360A-530 by the dates specified in this section.²⁴²

- (1) Class A and Class B operators must be trained within sixty days of assuming duties of the operator class.
- (2) Class C operators must be trained before assuming duties of the operator class.

²⁴² Eliminated dates for initial compliance with operator training requirements. All compliance dates for previously deferred UST systems, including operator training, will be specified in Part 1 of the Chapter.

WAC 173-360A-530 Requirements for operator training²⁴³

UST system owners and operators shall ensure that each Class A, Class B, and Class C operator is trained in accordance with the requirements of this section. Any individual designated for more than one operator class must successfully complete the training required for each operator class that the individual is designated. The training required under this section for Class A and Class B operators is the same.

(1) Class A and Class B operators. Each individual designated as a Class A and/or a Class B operator must successfully complete a classroom, computer, or field-based training program or examination that:²⁴⁴

- (a) Is developed and administered by the department, an UST system owner or operator approved by the department, or an independent third party approved by the department;
- (b) Covers the following subject areas and associated requirements in this chapter. Training programs and examinations may be facility-specific:
 - (i) Administrative requirements, including:
 - (A) Licensing and fees;
 - (B) Facility compliance tags;
 - (C) Authority to accept product delivery;
 - (D) Financial responsibility; and
 - (E) Reporting and recordkeeping;
 - (ii) Certification and use of service providers;
 - (iii) Compliance inspections and enforcement;
 - (iv) Overview of UST systems and components;
 - (v) Product and equipment compatibility and demonstration;²⁴⁵
 - (vi) Installation and repair requirements;
 - (vii) Spill and overfill prevention;
 - (viii) Release detection;

²⁴³ Consistent with §280.242 of the federal rule, edited section header to help distinguish between “operators” and “Class A, B, and C operators,”

²⁴⁴ Clarified that the training required for Class A and Class B operators is the same, and that successful completion of the training satisfies the requirements for both classes.

²⁴⁵ Consistent with §280.242 of the federal rule, added equipment compatibility demonstrations to the training requirements for Class A and Class B operators.

- (ix) Corrosion protection and internal lining;
 - (x) Secondary and under-dispenser containment;
 - (xi) Operation and maintenance requirements, including inspections and testing;²⁴⁶
 - (xii) Release reporting and confirmation requirements;
 - (xiii) Overview of site assessment requirements;
 - (xiv) Overview of cleanup requirements for releases, including the applicability of chapter 173-340 WAC;
 - (xv) Temporary closure, permanent closure, and change-in-service requirements;
 - (xvi) Operator training requirements, including training of Class C operators; and
 - (xvii) Any other subject areas specified by the department; and
- (c) Includes an evaluation of operator knowledge, such as testing or practical examination, that reasonably determines whether the operator has the necessary knowledge and skills to meet the responsibilities of the class.
- (2) Class C operators.** Each Class C operator must successfully complete a classroom, computer, or field-based training program that:
- (a) Is developed and administered by the department, a trained Class A or Class B operator, or an independent third party approved by the department;
 - (b) Provides training on how to respond to emergencies and alarms, including:
 - (i) Locating emergency response equipment;
 - (ii) Operating any emergency shut-off systems;
 - (iii) Identifying and responding to any alarms; and
 - (iv) Responding to and reporting any spills or releases; and
 - (c) Includes an evaluation of operator knowledge, such as testing or practical examination, that reasonably determines whether the operator has the necessary knowledge and skills to meet the responsibilities of the class.
- (3) Reciprocity for out-of-state training.** Class A and Class B operators previously designated in another state or at a tribal UST facility shall be deemed to meet the training requirements in subsection (1) of this section if:
- (a) They successfully completed a training program or examination meeting the requirements of that state or 40 C.F.R. Part 280, as applicable; and

²⁴⁶ Consistent with §280.242 of the federal rule, added new operation and maintenance requirements to the training requirements for Class A and Class B operators.

- (b) They possess the training records required under WAC 173-360A-560(2) and the records identify the state where they were designated and trained.

(4) Acceptance of prior in-state training.

- (a) Class A and Class B operators who successfully completed an applicable training program or examination approved by the department before October 1, 2012, and possess the training records required in WAC 173-360A-560(2) shall be deemed to meet the training requirements in subsection (1) of this section.
- (b) Class C operators who successfully completed a training program approved by the department or administered by a trained Class A or Class B operator before October 1, 2012, and possess the training records required in WAC 173-360A-560(2) shall be deemed to meet the training requirements in subsection (2) of this section.

WAC 173-360A-540 Retraining requirements for Class A and Class B operators

UST system owners and operators shall ensure that Class A and Class B operators are retrained, as applicable, in accordance with the requirements of this section.

- (1) Applicability.** If the department determines the owners and operators of an UST system are not in compliance with the requirements of this chapter, the department may require the Class A and Class B operators of that system to be retrained in accordance with subsection (2) of this section.²⁴⁷
- (2) Requirements.** Within sixty days of receipt of the department's determination of noncompliance, Class A and Class B operators requiring retraining must successfully complete a training program or comparable examination meeting the requirements in WAC 173-360A-530(1) and submit a copy of the certificate of completion to the department. At a minimum, the retraining must cover the areas determined to be out of compliance.

²⁴⁷ Eliminated exemption from retraining requirements for Class A and Class B operators retrained annually.

WAC 173-360A-545 Operation and maintenance plans

UST system owners and operators shall ensure that operation and maintenance plans are developed and maintained, as applicable, in accordance with the requirements of this section.

- (1) **Applicability.** If the department determines the owners and operators of an UST system are not in compliance with the requirements of this chapter, the department may require the owners and operators to develop an operation and maintenance plan for each UST system at the UST facility where the noncompliant system is located. The department may require the development of such a plan in place of or in addition to any retraining of Class A or Class B operators required under WAC 173-360A-540.
- (2) **Development.** Operation and maintenance plans for UST systems must be developed and a copy submitted to the department within sixty days of receipt of the department's determination of noncompliance.
- (3) **Updates.** The operation and maintenance plan for an UST system must be updated within sixty days of any modification of the system that changes how the system must be operated and maintained under this chapter.
- (4) **Content.** At a minimum, the operation and maintenance plan for an UST system must include the actions required under this chapter to operate and maintain the system, including as applicable:²⁴⁸
 - (a) Release detection;
 - (b) Spill and overfill prevention;
 - (c) Corrosion protection
 - (d) Internal lining; and
 - (e) Containment sumps.²⁴⁹
- (5) **Recordkeeping.** Operation and maintenance plans for UST systems must be maintained and made available to the department in accordance with WAC 173-360A-240. Plans must be maintained until UST systems are permanently closed or undergo a change-in-service.

²⁴⁸ Clarified that most operation and maintenance requirements are dependent on whether the specified equipment is required for the UST system.

²⁴⁹ Added operation and maintenance of containment sumps to the list of what must be included in operation and maintenance plans, consistent with the new requirements.

WAC 173-360A-550 Emergency response requirements

- (1) Presence of operators.** While an UST facility is manned, UST system owners and operators shall ensure at least one of the individuals manning the facility is a properly trained Class A, Class B, or Class C operator.
- (2) Signage.** At each UST facility, UST system owners and operators shall post and maintain signage providing emergency response information. The signage must:
 - (a) Be posted in prominent areas of the facility that are easily visible to individuals who dispense or deliver regulated substances;
 - (b) Identify the location of fire extinguishers and any emergency shut-off devices at the facility; and
 - (c) Provide instructions on what to do in case of an emergency at the facility. At a minimum, the instructions must include the following or equivalent wording:

(Name and address of facility)

IN CASE OF FIRE, SPILL OR RELEASE

(Insert if applicable: Use emergency shut off)

Call the fire department: (911 or local fire department telephone number)

Call the facility operator: (24-hour telephone number)

WAC 173-360A-560 Documentation and recordkeeping

UST system owners and operators shall maintain records documenting all currently designated Class A, Class B, and Class C operators at an UST facility and the training received by those operators. The records must be maintained and made available in accordance with WAC 173-360A-240.

- (1) Designated operators.** Records documenting Class A, Class B, and Class C operators at an UST facility must include the following information:
- (a) The facility's name, address, and compliance tag number; and
 - (b) For each individual designated at the facility:
 - (i) The name of the individual;
 - (ii) The UST systems and operator classes to which the individual has been designated;
 - (iii) The date the individual assumed the duties of each operator class; and
 - (iv) The date the individual completed initial training and any required retraining for each operator class.
- (2) Training of designated operators.** Records documenting the initial training and any required retraining of Class A, Class B, and Class C operators must include a certificate of completion. Certificates must include the following information:
- (a) The name of the trainee;
 - (b) The date the trainee completed the training;
 - (c) The operator class or classes covered by the training;
 - (d) The name of the company providing the training; and
 - (e) For classroom and field-based training, the printed name and signature of the trainer or examiner.

Part 6: Release Detection

Crosswalk of Sections

TOPIC		AMENDED RULE §	CURRENT RULE §	FEDERAL RULE §
Release detection		Part 6	In Part 3 In Part 8	Subpart D In Subparts B, K
General release detection requirements		600	335(1), (3) 345(1) 350(1), (2)(b) 355	40 (except (a)(3)) 45 252(d)
Compliance schedule [deleted]		--	330 340(1) 345(3)	Former 40(c) Former 41(a)(2) Former 42(a)
Release detection methods for tanks		610	335(2)(a) 340(2) 345(2-6) 810(3)	In 20 41(a) 42 252(d)(1)
Release detection methods for piping		615	335(2)(b) 340(2) 350(2), (3)(c) 820(4)(a), (b)	In 20 41(b) 42 44(c) 252(d)(2)
Tanks ONLY	Inventory control	620	345(6)(a)	43(a)
	Weekly manual tank gauging	625	345(6)(b)	43(b)
	Monthly manual tank gauging [deleted]	--	345(6)(c)	--
	Automatic tank gauging	630	345(6)(e)	43(d)
	Tank tightness testing	635	345(6)(d)	43(c)
Piping ONLY	Automatic line leak detectors	640	350(3)(a)	44(a)
	Monthly electronic line leak detection [added]	645	--	--
	Line tightness testing	650	350(3)(b), (4)	44(b)
Tanks or Piping	Interstitial monitoring	655	340(2) 345(6)(h) 810(3) 820(4)(c)	42 43(g)
	Vapor monitoring	660	345(6)(f)	43(e)
	Groundwater monitoring	665	345(6)(g)	43(f)
	Statistical inventory reconciliation	670	345(6)(i)	43(h)
	Other release detection methods	675	345(6)(j)	43(i)

WAC 173-360A-600 General release detection requirements

Owners and operators shall ensure that tanks and underground piping are monitored for leaks in accordance with the requirements of this Part. This section specifies general release detection requirements. WAC 173-360A-610 and 173-360A-615 identify allowed release detection methods for monitoring tanks and piping. WAC 173-360A-620 through 173-360A-675 specify requirements for each release detection method.

- (1) Applicability.** The following tanks and underground piping must be monitored for leaks in accordance with this Part:
 - (a) Any portion of a tank that routinely contains regulated substances; and
 - (b) Any underground piping that routinely contains regulated substances. However, underground piping conveying regulated substances under suction does not need to be monitored for leaks if the piping is designed and constructed to meet the following standards:
 - (i) The below-grade piping operates at less than atmospheric pressure;
 - (ii) The below-grade piping is sloped so that the contents of the pipe will drain back into the storage tank if the suction is released;
 - (iii) Only one check valve is included in each suction line;
 - (iv) The check valve is located directly below and as close as practical to the suction pump; and
 - (v) A method is provided that allows compliance with (b)(i) through (iv) of this subsection to be readily determined.
- (2) Closure of UST systems.** Any UST system that cannot be monitored for leaks in accordance with the requirements of this Part must be closed in accordance with Part 8 of this chapter.²⁵⁰
- (3) Release detection methods.** Tanks and underground piping must be monitored for leaks using one of the applicable methods, or combination of methods, of release detection specified in WAC 173-360A-610 and 173-360A-615.
- (4) Notification of changes in methods.** Within thirty days after any change in release detection methods used, owners and operators shall notify the department in writing.
- (5) Performance standards for methods.** Release detection methods must be able to:
 - (a) Detect a leak from any portion of the tank or underground piping that routinely contains regulated substances;
 - (b) Detect the leak rate or quantity specified for the method in this Part;

²⁵⁰ Consistent with §280.40(c) of the federal rule, made closure requirement applicable to all UST systems, not just “existing UST systems.

- (c) Detect the specified leak rate or quantity with a probability of detection of at least 0.95 and a probability of false alarm of no more than 0.05, if required for the method in this Part;
 - (d) Meet any other standards specified for the method in this Part; and
 - (e) Meet the compatibility requirements in WAC 173-360A-350.
- (6) Third-party certifications.**²⁵¹ All electrical and mechanical release detection equipment and statistical inventory reconciliation methods must be certified in writing by an independent third party as capable of meeting the performance standards in subsection (5)(c) of this section based on the type of regulated substance stored. Third party evaluations must be performed using a test procedure:
- (a) Developed by the U.S. Environmental Protection Agency;
 - (b) Developed by a nationally or internationally recognized association or independent testing laboratory; or
 - (c) Deemed equivalent by a nationally or internationally recognized association or independent testing laboratory to a test procedure developed by the U.S. Environmental Protection Agency.
- (7) Performance of release detection.** Release detection must be performed in accordance with:
- (a) Any instructions specified by the equipment manufacturer;
 - (b) Any conditions specified in third-party certifications, if applicable;²⁵² and
 - (c) Any requirements specified for the method in this Part.
- (8) Suspected releases.** When the results of release detection under this Part indicate a release may have occurred, the suspected release must be reported and investigated in accordance with Part 7 of this chapter. The establishment of leak indication thresholds is a means of setting a standard for the equipment or method used. It is not intended to imply that actual leak rates or quantities less than the thresholds are allowable. No release is acceptable, and any indication that a release may have occurred should be reported and investigated in accordance with Part 7 of this chapter.
- (9) Recordkeeping.** Records of release detection must be maintained in accordance with WAC 173-360A-240. The records must document compliance with this Part and include the following:

²⁵¹ Clarified requirement that all release detection equipment and statistical inventory reconciliation methods must be third-party certified as capable of meeting applicable performance standards.

²⁵² Clarified requirement that release detection equipment must be operated in accordance with any conditions specified in third-party certifications.

- (a) Any third-party certifications of release detection equipment or statistical inventory reconciliation methods required under this Part. Certifications must be maintained for as long as the equipment or method is used;²⁵³
- (b) Any site evaluations required under WAC 173-360A-660 or 173-360A-665 for using vapor monitoring or groundwater monitoring as a release detection method. Site evaluations must be maintained for as long as the method is used;²⁵⁴ and
- (c) The performance of release detection required under this Part, including the results of all monitoring, testing, and sampling.²⁵⁵
 - (i) For tank tightness testing (WAC 173-360A-635), line tightness testing (WAC 173-360A-650),²⁵⁶ and vapor monitoring using a tracer compound in accordance with WAC 173-360A-610(3)(d) or 173-360A-615(3)(b),²⁵⁷ at least the last two test results must be maintained.
 - (ii) For all other release detection methods, results must be maintained for at least three years.²⁵⁸

²⁵³ Changed retention period for third-party certification records from five years to as long as the equipment or method is used. The retention period in the federal rule is five years.

²⁵⁴ Consistent with §280.45(a) of the federal rule, specified that site evaluation records used for vapor and groundwater monitoring methods must be maintained for as long as the method is used. Unlike the federal rule, made requirement apply on effective date of rule instead of within three years of effective date.

²⁵⁵ Consistent with §280.45(b)(2) and (3) of the federal rule, changed recordkeeping requirements for release detection results. Except as otherwise noted, the requirements are the same as under the federal rule.

²⁵⁶ Changed retention period for tank and line tightness test results from the last test to the last two test, including when performed on previously deferred UST systems. The federal rule requires the last test result.

²⁵⁷ Specified that retention period for results from vapor monitoring using a tracer compound every two years is the last two test results. The federal rule requires the last test result.

²⁵⁸ Changed retention period for results from all other release detection methods, including when performed on previously deferred UST systems, from five years to three years. The federal rule requires the last test result.

WAC 173-360A-610 Release detection methods for tanks

Owners and operators shall monitor tanks for leaks using the methods, or combination of methods, of release detection specified in this section.

- (1) Tanks requiring secondary containment.** Tanks requiring secondary containment under WAC 173-360A-310(4)(a) must be monitored for leaks at least every thirty days using interstitial monitoring (WAC 173-360A-655).²⁵⁹
- (2) Tanks not requiring secondary containment.** Except as provided for previously deferred UST systems under subsection (3) of this section, tanks not requiring secondary containment under WAC 173-360A-310(4)(a) must be monitored for leaks at least every thirty days (except as otherwise provided) using one of the following methods, or combination of methods, of release detection:²⁶⁰
 - (a) Combination of inventory control (WAC 173-360A-620) and tank tightness testing (WAC 173-360A-635). Tank tightness testing must be performed at least every five years. This combination of methods may be used only if the tank has been installed for less than ten years;
 - (b) Combination of weekly manual tank gauging (WAC 173-360A-625) and tank tightness testing (WAC 173-360A-635). Tank tightness testing must be performed at least every five years. This combination of methods may be used only if:
 - (i) The tank has been installed for less than ten years; and
 - (ii) The tank's capacity is less than or equal to two thousand gallons;²⁶¹
 - (c) Weekly manual tank gauging (WAC 173-360A-625). This method may be used as the sole method of release detection only if:
 - (i) The tank's capacity is less than or equal to five hundred fifty gallons; or
 - (ii) The tank's capacity is five hundred fifty-one gallons to one thousand gallons and the tank meets the diameter criteria in Table 625-1;²⁶²
 - (d) Automatic tank gauging (WAC 173-360A-630);

²⁵⁹ Consistent with §280.20 of the federal rule, specified that previously deferred UST systems installed after effective date of rule must be interstitially monitored.

²⁶⁰ To be consistent with §280.43 of the federal rule, eliminated monthly manual tank gauging as an allowable method of release detection, either alone or in combination with tank tightness testing. This method was only allowed for emergency power generator UST systems.

²⁶¹ Consistent with §280.43(b)(5) of the federal rule, changed the applicability of the combined method of weekly manual tank gauging and tank tightness testing.

²⁶² Consistent with §280.43(b)(5) of the federal rule, changed the applicability of weekly manual tank gauging as a sole method of release detection.

- (e) Interstitial monitoring (WAC 173-360A-655). This method may be used only if the tank is secondarily contained and meets the performance standards in WAC 173-360A-310(4)(b);²⁶³
 - (f) Vapor monitoring (WAC 173-360A-660);
 - (g) Groundwater monitoring (WAC 173-360A-665);
 - (h) Statistical inventory reconciliation (WAC 173-360A-670); or
 - (i) Other release detection methods (WAC 173-360A-675).
- (3) Additional methods for certain previously deferred UST systems.**²⁶⁴ Field-constructed tanks not requiring secondary containment under WAC 173-360A-310(4)(a) with a capacity greater than fifty thousand gallons 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) Tank tightness testing (WAC 173-360A-635) performed at least annually, except the method must be able to detect a 0.5 gallon per hour leak rate;
 - (b) Combination of automatic tank gauging (WAC 173-360A-630) performed at least every thirty days, except the method must be able to detect a one gallon per hour leak rate, and tank tightness testing (WAC 173-360A-635) performed at least every three years, except the method must be able to detect a 0.2 gallon per hour leak rate;
 - (c) Combination of automatic tank gauging (WAC 173-360A-630) performed at least every thirty days, except the method must be able to detect a two gallons per hour leak rate, and tank tightness testing (WAC 173-360A-635) performed at least every two years, except the method must be able to detect a 0.2 gallon per hour leak rate;
 - (d) Vapor monitoring (WAC 173-360A-660) 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;
 - (e) Combination of inventory control (WAC 173-360A-620) 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:

²⁶³ For interstitial monitoring method, eliminated requirements for UST systems that are secondarily contained using secondary barriers or internally-fitted liners. According to Ecology's database, there are no UST systems in the state using secondary barriers to meet regulatory requirements. Double-walled tanks are defined to include tanks with internally fitted liners. And secondary barriers will no longer be allowed.

²⁶⁴ Consistent with §280.252(d)(1) of the federal rule, incorporated additional release detection methods for certain previously deferred UST systems installed before effective date of the rule (those systems not requiring secondary containment).

- (i) Tank tightness testing (WAC 173-360A-635) performed at least every two years, except the method must be able to detect a 0.5 gallon per hour leak rate;
 - (ii) Vapor monitoring (WAC 173-360A-660) performed at least every thirty days; or
 - (iii) Groundwater monitoring (WAC 173-360A-665) performed at least every thirty days; or
- (f) Other release detection methods (WAC 173-360A-675), except owners and operators must demonstrate the method can detect a leak as effectively as any of the methods allowed in (a) through (e) of this subsection and the department must approve the method. In comparing methods, the department must consider the size of release that can be detected and the frequency and reliability of detection.

WAC 173-360A-615 Release detection methods for piping

Owners and operators shall 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-310(5)(a) must be monitored for leaks as follows.²⁶⁵
 - (a) Pressurized piping.** Underground piping conveying regulated substances under pressure must be equipped with an automatic line leak detector (WAC 173-360A-640) and monitored for leaks at least every thirty days using interstitial monitoring (WAC 173-360A-655).
 - (b) Suction piping.** Underground piping conveying regulated substances under suction, except as provided under WAC 173-360A-600(1)(b), must be monitored for leaks at least every thirty days using interstitial monitoring (WAC 173-360A-655).
- (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-310(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-640); and
 - (ii) Monitored for leaks at least annually using line tightness testing (WAC 173-360A-650) or every thirty days using one of the following methods, or combination of methods, of release detection:
 - (A) Monthly electronic line leak detection (WAC 173-360A-645);²⁶⁶
 - (B) Interstitial monitoring (WAC 173-360A-655). This method may be used only if the piping is secondarily contained and meets the performance standards in WAC 173-360A-310(5)(c);²⁶⁷
 - (C) Vapor monitoring (WAC 173-360A-660);
 - (D) Groundwater monitoring (WAC 173-360A-665);
 - (E) Statistical inventory reconciliation (WAC 173-360A-670); or

²⁶⁵ Consistent with §280.20 of the federal rule, specified that previously deferred UST systems installed after effective date of rule must be interstitially monitored.

²⁶⁶ Added electronic line leak detection as a monthly method for pressurized piping. The method is currently allowed as an “other method” of release detection. Ecology’s database shows that eight UST systems are using this method as their primary method.

²⁶⁷ For interstitial monitoring method, eliminated requirements for UST systems that are secondarily contained using secondary barriers or internally-fitted liners. See previous note under release detection methods for tanks.

- (F) Other release detection methods (WAC 173-360A-675).
- (b) Suction piping.** Underground piping conveying regulated substances under suction, except as provided under WAC 173-360A-600(1)(b), must be monitored for leaks at least every three years using line tightness testing (WAC 173-360A-650) or at least every thirty days using one of the following methods of release detection:
- (i) Interstitial monitoring (WAC 173-360A-655). This method may be used only if the piping is secondarily contained and meets the performance standards in WAC 173-360A-310(5)(c);²⁶⁸
 - (ii) Vapor monitoring (WAC 173-360A-660);
 - (iii) Groundwater monitoring (WAC 173-360A-665);
 - (iv) Statistical inventory reconciliation (WAC 173-360A-670); or
 - (v) Other release detection methods (WAC 173-360A-675).
- (3) Additional methods for certain previously deferred UST systems.**²⁶⁹ Underground piping not requiring secondary containment under WAC 173-360A-310(3)(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-650) performed semiannually or annually, except the method must be able to detect the leak rate specified in Table 615-1. 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 615-2;

Table 615-1: 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

²⁶⁸ For interstitial monitoring method, eliminated requirements for UST systems that are secondarily contained using secondary barriers or internally-fitted liners. See previous note under release detection methods for tanks.

²⁶⁹ Consistent with §280.252(d)(2) of the federal rule, incorporated additional release detection methods for certain previously deferred UST systems installed before effective date of the rule (those systems not requiring secondary containment).

Table 615-2: Phase-In for Piping Segments ≥ 100,000 Gallons in Volume

Test	Timeframe	Leak Detection Rate
First test	Not later than [three years after effective date of rule]	May use up to 6.0 gallons per hour leak rate
Second test	Between [three years after effective date of rule] and [six years after effective date of rule]	May use up to 6.0 gallons per hour leak rate
Third test	Between [six years after effective date of rule] and [seven years after effective date of rule]	Must use 3.0 gallons per hour leak rate
Subsequent tests	After [seven years after effective date of rule]	Begin using semiannual or annual line testing according to Table 615-1

- (b) Vapor monitoring (WAC 173-360A-660) 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-620) 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-650) 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 615-1;
 - (ii) Vapor monitoring (WAC 173-360A-660) performed at least every thirty days; or
 - (iii) Groundwater monitoring (WAC 173-360A-665) performed at least every thirty days; or
- (d) Other release detection methods (WAC 173-360A-675), 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 method. In comparing methods, the department must consider the size of release that can be detected and the frequency and reliability of detection.

WAC 173-360A-620 Inventory control

Owners and operators shall ensure that inventory control (or another test of equivalent performance) is performed in accordance with the requirements of this section.

(1) Performance standards.

- (a) Inventory control must be performed in a manner that is able to detect leaks of at least one percent of the monthly flow-through plus one hundred thirty gallons.
- (b) Inventory control must be performed using a gauge stick or an automatic tank gauge system that is able to measure the following:²⁷⁰
 - (i) Tank liquid levels over the full range of the tank's height to the nearest one-eighth of an inch; and
 - (ii) Water levels in the bottom of the tank to the nearest one-eighth of an inch.
- (c) Dispensing meters must be calibrated to local standards or an accuracy of at least six cubic inches for every five gallons of regulated substances that is withdrawn.
- (d) The fill pipe through which regulated substances are delivered into the tank must have a drop tube that extends to within one foot of the bottom of the tank.

(2) Performance.²⁷¹ Inventory control must be performed in accordance with the requirements of this subsection. ATG systems must be operated in accordance with the manufacturer's instructions and any conditions specified in third-party certifications. The following code of practice may be used, where applicable, as guidance in meeting the requirements of this subsection: American Petroleum Institute, Recommended Practice 1621, "Bulk Liquid Stock Control at Retail Outlets."

- (a) Each day regulated substances are removed from or added to the tank, the following inventory volume measurements and calculations must be performed:
 - (i) Measure the number of gallons of regulated substances removed from the tank within the local standards for meter calibration or an accuracy of at least six cubic inches for every five gallons of regulated substances that is withdrawn;
 - (ii) Measure the tank liquid level to the nearest one-eighth of an inch before and after any delivery of regulated substances, convert the two measurements into gallons, calculate the difference between the two measurements, and reconcile the change in inventory volume with delivery receipts;
 - (iii) Measure the tank liquid level at the end of the day (ending inventory) to the nearest one-eighth of an inch and convert the measurement into gallons. The

²⁷⁰ Clarified that inventory control may be performed using either a gauge stick or an automatic tank gauge.

²⁷¹ Clarified how method must be performed and that automatic tank gauges must be operated in accordance with manufacturer's instructions and any conditions specified in third-party specifications.

measurement taken after a delivery of regulated substances may be used to meet this requirement;

- (iv) Calculate the book inventory by adding the starting inventory and the number of gallons delivered and then subtracting the number of gallons dispensed; and
 - (v) Calculate the daily inventory imbalance (overage or shortage) by subtracting the book inventory from the ending inventory.
- (b) At least once each month, the water level in the tank must be measured to the nearest one-eighth of an inch.
 - (c) At the end of each monitoring period, calculate the monthly imbalance (overage or shortage) by adding together all of the daily imbalances.
- (3) Suspected release.**²⁷² A release is suspected based on inventory control if:
- (a) The monthly inventory imbalance is greater than one percent of the monthly flow-through plus one hundred thirty gallons; or
 - (b) The presence of water in the tank is unexplained.

²⁷² Clarified when a release is suspected based on results of inventory control.

WAC 173-360A-625 Weekly manual tank gauging

Owners and operators shall ensure that weekly manual tank gauging is performed in accordance with the requirements of this section.

(1) Performance standards.

- (a) Weekly manual tank gauging must be performed in a manner that is able to detect any leaks greater than the applicable test standards in Table 625-1 with a probability of detection of at least 0.95 and a probability of false alarm of no more than 0.05.
- (b) Weekly manual tank gauging must be performed using a gauge stick or an automatic tank gauge (ATG) system that is able to measure the following:²⁷³
 - (i) Tank liquid levels over the full range of the tank's height to the nearest one-eighth of an inch; and
 - (ii) Water levels in the bottom of the tank to the nearest one-eighth of an inch.²⁷⁴

(2) Performance.²⁷⁵ Weekly manual tank gauging must be performed in accordance with the requirements of this subsection. ATG systems must be operated in accordance with the manufacturer's instructions and any conditions specified in third-party certifications.

- (a) Each week, the following inventory volume measurements and calculations must be performed:
 - (i) Select a period that is at least as long as the applicable minimum test duration specified in Table 625-1. During this period, no liquid may be added or removed from the tank;
 - (ii) Take two consecutive tank liquid level measurements to the nearest one-eighth of an inch at the beginning and at the end of the selected period;
 - (iii) Calculate the average of the two beginning measurements and the average of the two ending measurements and convert the averages from inches to gallons;
 - (iv) Calculate the change in volume by subtracting the average ending measurement from the average beginning measurement; and
 - (v) Compare the change in volume to the applicable weekly standard in Table 625-1.

²⁷³ Clarified that weekly manual tank gauging may be performed using either a gauge stick or an automatic tank gauge.

²⁷⁴ Added requirement that equipment used to conduct weekly manual tank gauging must be able to measure water levels.

²⁷⁵ Clarified how method must be performed and that automatic tank gauges must be operated in accordance with manufacturer's instructions and any conditions specified in third-party specifications.

- (b) Each month, calculate the monthly change in volume by adding together the four weekly changes in volume and compare to the applicable monthly standard in Table 625-1.
 - (c) At least once each month, the water level in the tank must be measured to the nearest one-eighth of an inch.²⁷⁶
- (3) Suspected release.²⁷⁷** A release is suspected based on weekly manual tank gauging if:
- (a) Any weekly change in volume is greater than the applicable weekly standard in Table 625-1;
 - (b) Any monthly change in volume is greater than the applicable monthly standard in Table 625-1; or
 - (c) The presence of water in the tank is unexplained.

Table 625-1: Weekly manual tank gauging criteria²⁷⁸

Nominal Tank Capacity	Minimum Test Duration	Weekly Standard (one test)	Monthly Standard (four test average)
550 gallons or less	36 hours	10 gallons	5 gallons
551 – 1,000 gallons (when tank diameter is 64 inches)	44 hours	9 gallons	4 gallons
551 – 1,000 gallons (when tank diameter is 48 inches)	58 hours	12 gallons	6 gallons
551 – 1,000 gallons (when tank diameter other than 64 or 48 inches)	36 hours	13 gallons	7 gallons
1,001 – 2,000 gallons	36 hours	26 gallons	13 gallons

²⁷⁶ Added requirement that water levels must be measured at least once each month.

²⁷⁷ Clarified when release suspected based on results of weekly manual tank gauging.

²⁷⁸ Consistent with §280.43(b) of the federal rule, changed tank criteria and test standards.

WAC 173-360A-630 Automatic tank gauging

Owners and operators shall ensure automatic tank gauging, using either in-tank static testing or continuous in-tank leak detection, is performed in accordance with the requirements of this section.

- (1) Performance standards.** For the purposes of this method, automatic tank gauge (ATG) systems must be able to:
 - (a) Detect at least a 0.2 gallon per hour leak rate from any portion of the tank that routinely contains a regulated substance with a probability of detection of at least 0.95 and a probability of false alarm of no more than 0.05;
 - (b) Measure tank liquid levels over the full range of the tank's height; and
 - (c) Measure water levels in the bottom of the tank.²⁷⁹
- (2) Performance.** Leak detection tests must be performed in accordance with the manufacturer's instructions and any conditions specified in third-party certifications.²⁸⁰ Tests must be performed with ATG systems operating in one of the following modes:²⁸¹
 - (a) In-tank static test mode. In this mode, testing must be performed at least once every thirty days; or
 - (b) Continuous in-tank leak detection mode. In this mode, ATG systems must operate on an uninterrupted basis or operate within a process that allows the system to gather incremental measurements to determine the leak status of the tank at least once every thirty days.
- (3) Suspected release.** A release is suspected if an ATG system detects any leak of regulated substances from the tank or the presence of water in the tank is unexplained.²⁸²

²⁷⁹ Clarified which inventory control requirements ATG systems must meet.

²⁸⁰ Clarified that ATG systems must be operated in accordance with manufacturer's instructions and any conditions specified in third-party specifications.

²⁸¹ Consistent with §280.43(d), added specific requirements for automatic tank gauging based on the mode used to perform the test (in-tank static test or continuous in-tank leak detection).

²⁸² Clarified when release suspected based on results of automatic tank gauging.

WAC 173-360A-635 Tank tightness testing

Owners and operators shall ensure that tank tightness testing (or another test of equivalent performance) is performed in accordance with the requirements of this section.

- (1) Performance standards.** Tank tightness tests must be able to detect at least a 0.1 gallon per hour leak rate from any portion of the tank up to the ninety-five percent full level or up to the product level limited by overfill prevention equipment while accounting for the effects of thermal expansion or contraction of the regulated substance, vapor pockets, tank deformation, evaporation or condensation, and the location of the water table. The tests must be able to detect the specified leak rate with a probability of detection of at least 0.95 and a probability of false alarm of no more than 0.05.
- (2) Performance and reporting.**²⁸³ Tank tightness tests must be:
 - (a) Performed by or under the direct supervision of a service provider certified in accordance with Part 9 of this chapter;
 - (b) Performed in accordance with the manufacturer's instructions and any conditions specified in third-party certifications; and
 - (c) Certified and reported in accordance with WAC 173-360A-230(3)(b).
- (3) Suspected release.** A release is suspected if a tank tightness test detects any leak of regulated substances from a tank.²⁸⁴

²⁸³ Clarified who may perform tank tightness tests, how tests must be performed, and how results must be reported.

²⁸⁴ Clarified when release suspected based on results of tank tightness tests.

WAC 173-360A-640 Automatic line leak detectors

Owners and operators shall ensure that pressurized piping is equipped with automatic line leak detectors meeting the requirements of this section.

- (1) Performance standards.** For the purposes of this method, automatic line leak detectors must be able to:
 - (a) Detect a leak rate of at least three gallons per hour at ten pounds per square inch line pressure within one hour from any portion of the piping that routinely contains a regulated substance with a probability of detection of at least 0.95 and a probability of false alarm of no more than 0.05; and
 - (b) If a leak is detected, alert the operator by shutting off or restricting the flow of regulated substances or triggering an audible or visual alarm.
- (2) Performance.** Automatic line leak detectors must be operated in accordance with the manufacturer's instructions and any conditions specified in third-party certifications.²⁸⁵
- (3) Suspected release.** A release is suspected if an automatic line leak detector detects any leak of regulated substances from the piping.²⁸⁶

²⁸⁵ Clarified that automatic line leak detectors must be operated in accordance with manufacturer's instructions and any conditions specified in third-party specifications.

²⁸⁶ Clarified when release suspected based on results of automatic line leak detection.

WAC 173-360A-645 Monthly electronic line leak detection

Owners and operators shall ensure that monthly electronic line leak detection is performed in accordance with the requirements of this section.²⁸⁷

- (1) Performance standards.** For the purposes of this method, electronic line leak detectors must be able to detect a leak rate of at least 0.2 gallons per hour at operating pressure from any portion of the piping that routinely contains a regulated substance with a probability of detection of at least 0.95 and a probability of false alarm of no more than 0.05.
- (2) Performance.** Electronic line leak detection tests must be performed in accordance with the manufacturer's instructions and any conditions specified in third-party certifications.
- (3) Suspected release.** A release is suspected if an electronic line leak detector detects any leak of regulated substances from the piping.

²⁸⁷ Specified that electronic line leak detection may be used as a monthly method, and specified requirements for use of the method. The method is allowed under the current rule as an "other method."

WAC 173-360A-650 Line tightness testing

Owners and operators shall ensure that line tightness tests are performed in accordance with the requirements of this section.

- (1) Performance standards.** Line tightness tests must be able to detect at least a 0.1 gallon per hour leak rate at one and one-half times the operating pressure with a probability of detection of at least 0.95 and a probability of false alarm of no more than 0.05.
- (2) Performance and reporting.**²⁸⁸ Line tightness tests must be:
 - (a) Performed by or under the direct supervision of a service provider certified in accordance with Part 9 of this chapter; and
 - (b) Performed in accordance with the manufacturer's instructions and any conditions specified in third-party certifications; and
 - (c) Certified and reported in accordance with WAC 173-360A-230(3)(b).
- (3) Suspected release.** A release is suspected if a line tightness test detects any leak of regulated substances from the piping.²⁸⁹

²⁸⁸ Clarified who may perform line tightness tests, how tests must be performed, and how results must be reported.

²⁸⁹ Clarified when release suspected based on results of line tightness tests.

WAC 173-360A-655 Interstitial monitoring

Owners and operators shall ensure that interstitial monitoring is performed in accordance with the requirements of this section.

- (1) Performance standards.**²⁹⁰ The interstitial monitoring system must be able to detect a leak through the inner wall of any portion of the tank or underground piping that routinely contains a regulated substance. Methods that continuously monitor the interstitial space using a vacuum, pressure, or a liquid must be able to detect a breach in both the inner and outer walls.
- (2) Performance.** Interstitial monitoring must be performed in accordance with the manufacturer's instructions and any conditions specified in third-party certifications.²⁹¹
- (3) Suspected release.**²⁹² A release is suspected if an interstitial monitoring system detects:
 - (a) Any leak of regulated substances from the tank or piping being monitored;
 - (b) The presence of any liquid in the interstitial space of a double-walled tank; or
 - (c) The presence of any water in a monitored sump that is unexplained.

²⁹⁰ Eliminated requirements for UST systems that are secondarily contained using secondary barriers or internally-fitted liners. According to Ecology's database, there are no UST systems in the state using secondary barriers to meet regulatory requirements. Double-walled tanks are defined to include tanks that are equipped with internally-fitted liners. All new UST systems must be double-walled.

²⁹¹ Clarified that interstitial monitoring equipment must be operated in accordance with manufacturer's instructions and any conditions specified in third-party specifications.

²⁹² Clarified when release suspected based on results of interstitial monitoring, and incorporated new criteria in §280.50(b) of the federal rule regarding presence of any liquid in interstitial space.

WAC 173-360A-660 Vapor monitoring

Owners and operators shall ensure that vapor monitoring (testing or monitoring for vapors within the soil gas of the excavation zone) is performed in accordance with the requirements of this section. Except as otherwise provided in WAC 173-360A-610(3) or WAC 173-360A-615(3), vapor monitoring may be either passive (monitoring for presence of regulated substance) or active (monitoring for presence of tracer compound).²⁹³

(1) Performance standards.

- (a) The materials used as backfill must be sufficiently porous (e.g., gravel, sand, crushed rock) to readily allow diffusion of vapors from releases into the excavation area.
- (b) The stored regulated substance, or a tracer compound placed in the UST system, must be sufficiently volatile (e.g., gasoline) to result in a vapor level that is detectable by the monitoring devices located in the excavation zone in the event of a release from the tank.
- (c) The measurement of vapors by the monitoring device must not be rendered inoperative by the groundwater, rainfall, or soil moisture or other known interferences so that a release could go undetected for more than thirty days.
- (d) The level of background contamination in the excavation zone must not interfere with the method used to detect releases from the tank.
- (e) The vapor monitors must be designed and operated to detect any significant increase in concentration above background of the regulated substance stored in the UST system, a component or components of that substance, or a tracer compound placed in the UST system.
- (f) In the UST excavation zone, the site must be evaluated to ensure compliance with the requirements in (a) through (d) of this subsection and to establish the number and positioning of monitoring wells that will detect releases within the excavation zone from any portion of the tank or piping being monitored that routinely contains product. Site evaluations must be:
 - (i) Performed by or under the direct supervision of a service provider certified in accordance with Part 9 of this chapter; and
 - (ii) Certified and reported in accordance with WAC 173-360A-230(3)(b).²⁹⁴
- (g) Monitoring wells must be clearly marked and secured to avoid unauthorized access and tampering.

²⁹³ Clarified that vapor monitoring may be either passive or active, except as provided for certain release detection methods for previously deferred UST systems.

²⁹⁴ Consistent with §280.45(a) of the federal rule, specified who may perform site evaluations and how evaluations must be reported.

- (h) Monitoring wells must be constructed, maintained, and decommissioned in accordance with chapter 173-160 WAC.
- (2) Performance.** Vapor monitoring must be performed in accordance with the manufacturer's instructions and any conditions specified in third-party certifications.²⁹⁵
- (3) Suspected release.** A release is suspected if a vapor monitoring system detects any release of regulated substances from the tank or piping being monitored.²⁹⁶

²⁹⁵ Clarified that vapor monitoring equipment must be operated in accordance with manufacturer's instructions and any conditions specified in third-party specifications.

²⁹⁶ Clarified when release suspected based on results of vapor monitoring.

WAC 173-360A-665 Groundwater monitoring

Owners and operators shall ensure that groundwater monitoring (testing or monitoring for liquids on the groundwater) is performed in accordance with the requirements of this section. Except as otherwise provided in WAC 173-360A-610(3) or WAC 173-360A-615(3), groundwater monitoring may be either passive (monitoring for presence of regulated substance) or active (monitoring for presence of tracer compound).²⁹⁷

(1) Performance standards.

- (a) The regulated substance stored must be immiscible in water and have a specific gravity of less than one.
- (b) Groundwater must never be more than twenty feet from the ground surface and the hydraulic conductivity of the soil(s) between the UST system and the monitoring wells or devices must not be less than 0.01 cm/sec (e.g., the soil should consist of gravels, coarse to medium sands, coarse silts or other permeable materials).
- (c) The slotted portion of the monitoring well casing must be designed to prevent migration of natural soils or filter pack into the well and to allow entry of regulated substance on the water table into the well under both high and low groundwater conditions.
- (d) Monitoring wells must be sealed from the ground surface to the top of the filter pack.
- (e) Monitoring wells or devices must intercept the excavation zone or must be as close to it as is technically feasible.
- (f) The continuous monitoring devices or manual methods used must be able to detect the presence of at least one-eighth of an inch of free product on top of the groundwater in the monitoring wells.
- (g) Within and immediately below the UST system excavation zone, the site must be evaluated to ensure compliance with the requirements in (a) through (e) of this subsection and to establish the number and positioning of monitoring wells or devices that will detect releases from any portion of the tank or piping being monitored that routinely contains product. Site evaluations must be:
 - (i) Performed by or under the direct supervision of a service provider certified in accordance with Part 9 of this chapter; and
 - (ii) Certified and reported in accordance with WAC 173-360A-230(3)(b).²⁹⁸
- (h) Monitoring wells must be clearly marked and secured to avoid unauthorized access and tampering.

²⁹⁷ Clarified that groundwater monitoring may be either passive or active, except as provided for certain release detection methods for previously deferred UST systems.

²⁹⁸ Consistent with §280.45(a) of the federal rule, specified who may perform site evaluations and how evaluations must be reported.

- (i) Monitoring wells must be constructed, maintained, and decommissioned in accordance with chapter 173-160 WAC.
- (2) Performance.** Groundwater monitoring must be performed in accordance with the manufacturer's instructions and any conditions specified in third-party certifications.²⁹⁹
- (3) Suspected release.** A release is suspected if a groundwater monitoring system detects any release of regulated substances from the tank or piping being monitored.³⁰⁰

²⁹⁹ Clarified that groundwater monitoring equipment must be operated in accordance with manufacturer's instructions and any conditions specified in third-party specifications.

³⁰⁰ Clarified when release suspected based on results of groundwater monitoring.

WAC 173-360A-670 Statistical inventory reconciliation

Owners and operators shall ensure that statistical inventory reconciliation (SIR) is performed in accordance with the requirements of this section. SIR involves the application of statistical principles to inventory data similar to those described in WAC 173-360A-620.

- (1) Performance standards.**³⁰¹ The SIR method must:
 - (a) Be able to detect at least a 0.2 gallon per hour leak rate or a release of one hundred fifty gallons within a thirty-day period from any portion of the tank or underground piping that routinely contains a regulated substance with a probability of detection of at least 0.95 and a probability of false alarm of no more than 0.05;
 - (b) Use a threshold that does not exceed one-half the minimum detectible leak rate; and
 - (c) Be able to report a quantitative result with a calculated leak rate.
- (2) Performance.** SIR must be performed in accordance with the requirements of this subsection.
 - (a) Inventory control must be performed in accordance with the requirements in WAC 173-360A-620 and the SIR vendor's instructions.
 - (b) Within five days after the end of each monitoring period, inventory control data must be submitted to the SIR vendor for analysis.³⁰²
 - (c) Within ten days of receipt of inventory control data, SIR vendors shall complete an independent SIR analysis of the data and submit results to owners and operators. Results must be documented in writing by the SIR vendor.³⁰³
- (3) Suspected release.** A release is suspected if the SIR analysis result is a fail (meaning the SIR analysis shows a leak rate of at least 0.2 gallons per hour or one hundred fifty gallons per month).³⁰⁴
- (4) Late or inconclusive results.** If conclusive SIR results are not obtained every thirty days, then another release detection method must be used.³⁰⁵

³⁰¹ Consistent with §280.43(h) of the federal rule, changed performance standards for SIR.

³⁰² Added deadline for submission of inventory control data to SIR vendors.

³⁰³ Changed deadline for SIR results to be submitted to owners and operators.

³⁰⁴ Consistent with §280.43(h), changed thresholds for suspected release based on SIR results.

³⁰⁵ Clarified that another release detection method must be used if SIR results are late or inconclusive.

WAC 173-360A-675 Other release detection methods

Owners and operators shall ensure that other methods, or combinations of methods, of release detection are performed in accordance with the requirements of this section.

(1) Performance standards. Other release detection methods must:

- (a) Be able to detect a 0.2 gallon per hour leak rate or a release of one hundred fifty gallons within a thirty-day period from any portion of the tank or underground piping that routinely contains a regulated substance with a probability of detection of at least 0.95 and a probability of false alarm of no more than 0.05; or
- (b) Be approved by the department. To be approved, owners and operators must demonstrate the other method is able to detect a leak as effectively as any of the following methods. In comparing methods, the department must consider the size of release that can be detected and the frequency and reliability of detection. Owners and operators must comply with any additional requirements imposed by the department on its use to ensure protection of human health and the environment:
 - (i) Automatic tank gauging (WAC 173-360A-630);
 - (ii) Tank tightness testing (WAC 173-360A-635);
 - (iii) Monthly electronic line leak detection (WAC 173-360A-645).³⁰⁶
 - (iv) Line tightness testing (WAC 173-360A-650).³⁰⁷
 - (v) Interstitial monitoring (WAC 173-360A-655);
 - (vi) Vapor monitoring (WAC 173-360A-660);
 - (vii) Groundwater monitoring (WAC 173-360A-665); or
 - (viii) Statistical inventory reconciliation (WAC 173-360A-670);

(2) Performance. Other release detection methods must be performed in accordance with the manufacturer's instructions, any conditions specified in third-party certifications, and any additional requirements imposed by the department.³⁰⁸

(3) Suspected release. A release is suspected if an alternative leak detection method detects any leak of regulated substances from the tank or piping being monitored.³⁰⁹

³⁰⁶ Added monthly electronic line leak detection as a baseline for other methods.

³⁰⁷ Added line tightness testing as a baseline for other methods.

³⁰⁸ Clarified that other methods must be performed in accordance with the manufacturer's instructions, any conditions specified in third-party certifications, and any additional requirements imposed by the department.

³⁰⁹ Clarified when release suspected based on results of other methods.

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Part 7: Release Reporting, Confirmation, and Cleanup

Crosswalk of Sections

TOPIC	AMENDED RULE §	CURRENT RULE §	FEDERAL RULE §
Release reporting, confirmation, and cleanup	Part 7	In Part 3	Subpart E In Subpart G
Reporting of suspected releases	700	360	50
Releases suspected by department	710	365	51
Confirmation of suspected releases	720	370	52
Site assessment requirements	730	390 370(2), (3)	72 52(b)
Reporting and cleanup of spills and overfills	740	375	53
Reporting and cleanup of confirmed releases	750	372 399	52(a)(2) 52(b)(1) 53(a)

WAC 173-360A-700 Reporting of suspected releases

Within twenty-four hours³¹⁰ of identifying or being notified by another person of any of the following conditions, owners and operators of UST systems shall report a suspected release to the department and initiate an investigation of the suspected release in accordance with WAC 173-360A-720:

- (1) Presence of released regulated substances at the UST facility or in the surrounding area (such as the presence of free product or its constituents or vapors³¹¹ in soils, basements, sewer and utility lines, groundwater, or surface water);
- (2) Unusual operating conditions (such as the erratic behavior of product dispensing equipment, the sudden loss of regulated substances from an UST system, the unexplained presence of water in a tank, or the presence of liquid in the interstitial space of a secondarily contained UST system),³¹² unless:
 - (a) The UST system component is found not to be releasing regulated substances to the environment;
 - (b) Any defective UST system component is immediately repaired in accordance with WAC 173-360A-490 or replaced in accordance with WAC 173-360A-300; and
 - (c) For secondarily contained UST systems, any liquid in the interstitial space not used as part of the interstitial monitoring method (for example, brine) is immediately removed;³¹³ or
- (3) Monitoring results or alarms³¹⁴ from a release detection method required under part 6 of this chapter indicate that a release may have occurred, unless:
 - (a) A false alarm is confirmed (for example, alarm caused by power surge or filling the tank during release detection testing);³¹⁵
 - (b) The release detection equipment is found to be defective, and either:
 - (i) The defective equipment is immediately repaired or recalibrated in accordance with WAC 173-360A-490 or replaced in accordance with WAC 173-360A-300, and additional monitoring does not confirm the initial result; or

³¹⁰ Eliminated Ecology's authority to specify a period other than 24 hours for reporting suspected releases on a case-specific basis.

³¹¹ To be consistent with §280.50(a) of the federal rule, added presence of vapors as an example of environmental conditions that must be reported as a suspected release.

³¹² Consistent with §280.50(b) of the federal rule, added presence of liquid in interstitial space as an example of an unusual operating condition that must be reported as a suspected release.

³¹³ Consistent with §280.50(b)(3), added removal of liquid from interstitial space as condition for not reporting a suspected release based on unusual operating conditions.

³¹⁴ Consistent with §280.50(c) of the federal rule, added monitoring alarms as an indication of a suspected release.

³¹⁵ Consistent with §280.50(c)(4) of the federal rule, added example of a false alarm from a release detection method.

- (ii) Another applicable release detection method is used and additional monitoring does not confirm the initial result;³¹⁶
- (c) In the case of inventory control (WAC 173-360A-620), a second month of data does not confirm the initial result. However, owners and operators shall immediately investigate all larger-than-normal or reoccurring variations in inventory control results, and report such variations if they are unaccounted for, without waiting to obtain a second month of data; or
- (d) In the case of interstitial monitoring (WAC 173-360A-655):
 - (i) The leak is contained in the secondary containment;
 - (ii) Any liquid in the interstitial space not used as part of the interstitial monitoring method (for example, brine) is immediately removed; and
 - (iii) Any defective UST system component is immediately repaired in accordance with WAC 173-360A-490 or replaced in accordance with WAC 173-360A-300.³¹⁷

Note: Other federal, state, and local laws may also require reporting, and in some cases investigation, of suspected releases.

³¹⁶ Clarified that another release detection method must be used if defective equipment is not immediately repaired or replaced.

³¹⁷ Consistent with §280.50(c)(2) of the federal rule, clarified conditions under which a suspected release based on interstitial monitoring results does not need to be reported.

WAC 173-360A-710 Releases suspected by department

Upon identifying or being notified by another person of the presence of released regulated substances inside or outside of an UST facility³¹⁸ (such as the presence of free product or its constituents or vapors³¹⁹ in soils, basements, sewer and utility lines, groundwater, or surface water), the department may require owners and operators to investigate a suspected release from an UST system at the UST facility to determine whether they are the source of the regulated substances.

³¹⁸ Clarified that department may require investigation of suspected release based on the presence of regulated substances at the UST facility, not just outside of the UST facility.

³¹⁹ Consistent with §280.50(a) of the federal rule, added presence of vapors as an example of environmental conditions under which the department may require investigation of a suspected release.

WAC 173-360A-720 Confirmation of suspected releases

Unless remedial action is initiated in accordance with WAC 173-360A-750, owners and operators shall ensure that suspected releases of regulated substances from UST systems requiring reporting under WAC 173-360A-700 or investigation under WAC 173-360A-710 are investigated and confirmed in accordance with the steps and requirements of this section, except as otherwise directed by the department.

- (1) System test.** First, all tanks and underground piping that routinely contain or contained a regulated substance must be tested to determine whether a leak exists or whether a breach exists in either wall of the secondary containment.³²⁰ The tests must be completed within seven days of identifying a suspected release or receiving notice that the department requires investigation of a suspected release.
- (a) Performance.** For each tank or pipe, one of the following tests must be performed:
- (i) A tightness test of the tank or piping in accordance with WAC 173-360A-635 or 173-360A-650; or
 - (ii) A tightness test of the secondary containment area of the tank or piping in accordance with WAC 173-360A-490(6).³²¹
- (b) Next steps.**
- (i) If the test results do not indicate there is a release³²² and environmental contamination is not the basis for suspecting a release, then further investigation is not required.
 - (ii) If the test results do not indicate there is a release but environmental contamination is the basis for suspecting a release, then a site check must be performed in accordance with subsection (2) of this section.
 - (iii) If the test results indicate there is a release, then the confirmed release must be reported, investigated, and cleaned up in accordance with WAC 173-360A-750.
 - (iv) If the test results indicate there is a leak into the interstice or a release, then the defective UST system component must be repaired, replaced, or closed immediately.
 - (v) If the test results indicate there is a leak into the interstice or a release and release detection results are not the basis for suspecting a release, then release

³²⁰ Consistent with §280.52(a) of the federal rule, clarified that a system test may include testing to determine whether a breach exists in either wall of secondarily contained tanks or piping.

³²¹ Consistent with §280.52(a) of the federal rule, added option of testing the secondary containment of tanks and piping in place of tank or line tightness test.

³²² Consistent with §280.52(a) of the federal rule, replaced term “leak” with “release” to reflect the fact that leaks from secondarily contained UST systems may not result in releases.

detection equipment must be tested in accordance with WAC 173-360A-480 to determine whether it is operating properly.³²³

- (2) Site check.** Second, if required based on the results of the system test in subsection (1) of this section, a site check must be performed to determine whether regulated substances have been released from the UST system into the environment. The site check must be performed within sixty days of identifying a suspected release or receiving notice that the department requires investigation of a suspected release.
- (a) Performance.** Site checks must be performed in accordance with WAC 173-360A-730.
- (b) Next steps.**³²⁴
- (i) If the results of the site check do not indicate there has been a release from the UST system that may pose a threat to human health or the environment, then further investigation is not required.
 - (ii) If the results of the site check indicate there has been a release from the UST system that may pose a threat to human health or the environment, then the confirmed release must be reported, investigated, and cleaned up in accordance with WAC 173-360A-750.

³²³ Added requirement that release detection equipment must be tested if a system test indicates a leak or release, and the suspected release was not based on release detection.

³²⁴ Clarified next steps based on results of site check when results do not indicate a release that poses a threat. Also clarified that only releases that may pose a threat to human health or the environment require remedial action.

WAC 173-360A-730 Site assessment requirements

Owners and operators shall ensure site assessments, including site checks, are performed in accordance with the requirements of this section.³²⁵

- (1) Applicability.** Site assessments are required under this chapter to:
 - (a) Confirm a release from an UST system, as applicable (WAC 173-360A-720(2)). Such assessments are referred to as “site checks”;
 - (b) Suspend financial responsibility for a temporarily closed UST system (WAC 173-360A-800(3)(c) and 173-360A-1010(2));
 - (c) Keep an UST system temporarily closed for more than twelve months when the tanks or piping do not meet performance standards (WAC 173-360A-800(4));
 - (d) Permanently close an UST system, or a tank or piping run that is part of an UST system (WAC 173-360A-810(4)); and
 - (e) Undertake a change-in-service of an UST system (WAC 173-360A-820(4)).
- (2) Service provider.** Site assessments must be performed or directly supervised by a service provider certified in accordance with Part 9 of this chapter. The service provider must be present at the UST facility when and where the site assessment and any removal of tanks or piping are performed.
- (3) Sampling and analysis plans.** A sampling and analysis plan must be prepared for all sampling activities that are part of a site assessment.
 - (a) Submission.** The department may require a sampling and analysis plan be submitted to the department at least thirty days before any sampling is performed. The department may also require alternative sampling and analysis.
 - (b) Content.** A sampling and analysis plan must include the following information at a minimum:
 - (a) The reasons for performing the site assessment;
 - (b) The UST system or portion of the UST system around which the assessment is to be performed;
 - (c) The media to be assessed, including under what circumstances groundwater will be assessed or an explanation of why groundwater does not need to be assessed;
 - (d) The number and location of samples to be collected. If the plan does not include all of the soil samples specified in subsection (5)(a)(i) of this section,

³²⁵ Incorporated into the rule minimum requirements for site assessments from the guidance document referenced in the current rule. Except as otherwise noted, the requirements are the same.

then the plan must explain how physical conditions prevent the collection of those samples;

- (e) The methods to be used to collect and handle the samples;
- (f) The regulated substances to be analyzed for in the samples;
- (g) The methods to be used to analyze the samples for those substances;
- (h) The name of the accredited laboratory to be used to perform those analyses;
- (i) The methods to be used for quality assurance and quality control; and
- (j) Any other information required by the department.

(4) Health and safety requirements. Persons performing site assessments under this chapter shall comply, as applicable, with the requirements of the Occupational Safety and Health Act (20 U.S.C. Sec. 651 et seq.) and the Washington Industrial Safety and Health Act (chapter 49.17 RCW), and regulations promulgated pursuant thereto. These requirements are subject to enforcement by the designated federal and state agencies.

(5) Sampling and analysis requirements. Site assessments must be performed in accordance with the requirements of this subsection, except as otherwise directed by the department. The department may require additional sampling or analysis on a site-specific basis to confirm whether a release has occurred or poses a threat to human health or the environment or to address any such threats.

(a) Soil assessment.

- (i) Number and location of samples.** Soil samples must be collected where contamination has been detected or is most likely to be present. At a minimum, the soil samples specified in Table 730-1 must be collected unless:
 - (A) Physical conditions prevent the collection of any of the specified samples and an alternative sampling plan is prepared. The department must be notified in the site assessment report of any such changes and the reasons for the changes;
 - (B) A release is confirmed without the collection of some or all of the specified samples.
- (ii) Regulated substances to be analyzed.** All regulated substances currently or previously stored in the UST system must be analyzed for in the soil samples.
 - (A) For petroleum, analyze for the substances specified for the type of product in Table 830-1 of WAC 173-340-900.
 - (B) For hazardous substances, analyze for the substances and any likely decomposition by-products.

- (iii) **Analytical procedures.** The soil samples must be collected, handled, and analyzed in accordance with the requirements in WAC 173-340-830.
 - (iv) **Evaluation of results.** A release that may pose a threat to human health or the environment is confirmed if the concentration of any regulated substance analyzed in any of the soil samples exceeds the following levels:

 - (A) The level specified in Table 740-1 of WAC 173-340-900; or
 - (B) If a regulated substance is not listed in Table 740-1, a Method B unrestricted soil cleanup level established under WAC 173-340-740(3).
- (b) **Groundwater assessment.**
- (i) **Applicability.** Groundwater must be sampled if a release has not been confirmed by soil sampling and if:

 - (A) The lowest point of the UST system is located in or within two feet of groundwater;
 - (B) Groundwater monitoring wells already exist at the UST facility where the site assessment is being performed, the wells are located in areas at the facility that would provide useful data, and the condition of the wells allows for the collection of representative samples;
 - (C) Physical conditions prevent collection of some or all of the soil samples required under (a)(i) of this subsection and groundwater sampling is part of an alternative sampling plan; or
 - (D) Groundwater sampling is otherwise required by the department.
 - (ii) **Number and location of samples.** Groundwater samples must be collected where contamination has been detected or is most likely to be present.
 - (iii) **Regulated substances to be analyzed.** All regulated substances currently or previously stored in the UST system must be analyzed for in the groundwater samples.

 - (A) For petroleum, analyze for the substances specified for the type of product in Table 830-1 of WAC 173-340-900.
 - (B) For hazardous substances, analyze for the substances and any likely decomposition by-products.
 - (iv) **Analytical procedures.** The groundwater samples must be collected, handled, and analyzed in accordance with the requirements in WAC 173-340-830.
 - (v) **Evaluation of results.** A release that may pose a threat to human health or the environment is confirmed if the concentration of any regulated substance tested in any of the groundwater samples exceeds the following levels:

- (A) The levels specified in Table 720-1 of WAC 173-340-900; or
- (B) If the regulated substance is not listed in Table 720-1, a Method B potable groundwater cleanup level established under WAC 173-360-720(4).

(6) Reporting and cleanup of confirmed releases. If the results of a site assessment confirm that a release has occurred from an UST system and that the release may pose a threat to human health or the environment, then:

- (a) The service provider who performed or directly supervised the site assessment shall notify:
 - (i) An owner or operator of the UST system immediately; and
 - (ii) The department within twenty-four hours.³²⁶ However, if an owner or operator of the system is not immediately available, the service provider shall notify the department immediately.
- (b) Owners and operators shall report, investigate, and clean up the confirmed release in accordance with WAC 173-360A-750.

(7) Reporting results of assessment. Site assessment must be certified and reported in accordance with WAC 173-360A-230(3)(b). At a minimum, site assessment reports must meet the general submittal requirements in WAC 173-340-840 and include the following information:³²⁷

- (a) Information about the service provider who performed or directly supervised the site assessment, including the name of the service provider and the firm with which the service provider is affiliated;
- (b) Information about the UST system and the UST facility where the system is located, including:
 - (i) The name of the owner and operator of the system and the owner of the property where the system is located, if different;
 - (ii) The location of the system within the facility;
 - (iii) The components comprising the system;
 - (iv) Any previous repairs to the system;
 - (v) The type of regulated substances stored in the system, both currently and historically since the date of installation;

³²⁶ Changed deadline for service providers to report confirmed releases to the department from 72 hours to 24 hours to be consistent with reporting requirements for owners and operators.

³²⁷ Clarified what information that must be included in a site assessment report.

- (vi) The dimensions of the excavation zone and the depth, width, and type of backfill material used within that zone, if known;
- (vii) The number and location of any other currently or previously regulated systems at the facility; and
- (viii) The types and locations of any groundwater monitoring wells at the facility;
- (c) Information on any previous leaks or releases from the UST system, and whether the releases were cleaned up;
- (d) The physical characteristics of the UST facility, including the following:
 - (i) The current uses of the land within and adjacent to the facility, and any known prior uses of that land;
 - (ii) The geology of the site, including soil types and characteristics;
 - (iii) The hydrology of the site, including:
 - (A) Surface draining characteristics;
 - (B) Depth to groundwater (including seasonal fluctuations);
 - (C) Presence of groundwater in the excavation zone, direction of groundwater flow (if relevant to any groundwater sampling plan);
 - (D) Proximity of the UST system to any nearby drinking water wells or surface water bodies (if known); and
 - (E) Potential hydraulic connections between groundwater and any nearby surface water bodies (if known); and
 - (iv) The location of tax parcel(s) comprising the facility, any above-ground and below-ground structures at the facility, any paved areas at the facility, and any roads or utilities on or adjacent to the facility;
- (e) A summary of the sampling and analyses performed, including any changes to the plan or the sampling or analyses required under this section and the reason for those changes;
- (f) The results of the site assessment, including:
 - (i) A table showing, for each field sample collected, the identifying number assigned to the sample, whether the sample was a composite sample, the laboratory results for all indicator constituents analyzed, the method used to analyze the sample, and the detection limit for that method;
 - (ii) Any factors that may have compromised the quality of the data or validity of the results; and

- (iii) A conclusion as to whether there has been a release of regulated substances from the UST system;
 - (g) Site diagrams that include the following information at a minimum:
 - (i) The geographic location of the UST facility;
 - (ii) The location of the UST system within the UST facility, including the location of all tanks, piping, and dispensers;
 - (iii) To the extent known, the dimensions of the excavation zone and the backfill material used within that zone;
 - (iv) The physical characteristics of the UST facility, including the information specified in (d) of this subsection and the location of any other regulated UST systems at the facility; and
 - (v) The horizontal and vertical location of and identifying number for all samples collected for laboratory analysis, and which samples were collected from excavated soils; and
 - (h) Any other information required by the department.
- (8) Department determination.** After receiving a site assessment report, the department will determine whether any further assessment or information is necessary. The department may require further sampling or analysis if:
- (a) The assessment performed does not comply with the requirements of this section; or
 - (b) The department determines further assessment is necessary to confirm a suspected release, determine whether a release poses a threat to human health or the environment, or to address any such threats.
- (9) Recordkeeping.** Records of site assessments, including sampling and analysis plans and site assessment reports and checklists, must be maintained in accordance with WAC 173-360A-240 until the UST system is permanently closed or undergoes a change-in-service.

Table 730-1: Minimum number and location of soil samples

UST System Status	Tanks	Connected Dispensers	Connected Piping									
Operating, temporarily closed, or undergoing change-in-service	Collect two samples , one at each end of the tank. Collect two additional samples for each additional tank in the tank excavation zone. ³²⁸ (1, 2)	Collect two samples around each dispenser or set of dispensers connected to the UST system, one on each side. ³²⁹ (1, 2)	<p>Collect samples around connected piping where contamination is most likely to be present, such as at connections, fittings, or elbows. (1, 2)</p> <p>If a piping run is longer than fifty feet, then collect one additional sample for every fifty feet of piping. For example, collect one additional sample if the piping run is 50 to 99 feet long and two additional samples if the piping run is 100 to 150 feet long. (1, 2)</p>									
Undergoing permanent closure in place	Collect four samples , one on each side of the tank. Collect two additional samples for each additional tank in the tank excavation zone. ³³⁰ (1, 2)	<p>Collect one sample beneath each dispenser connected to the UST system. (1, 2)</p>										
Undergoing permanent closure by removal	<p>Samples from excavation zone: Collect the following samples from within the tank excavation zone:³³¹</p> <ul style="list-style-type: none"> • Collect one sample between one and two feet into the wall of the tank excavation zone where the pipe to the dispenser exited the tank. • Collect one sample at the bottom center of the tank excavation zone wall on each of the other three sides of the tank. (2) • Collect one sample in the bottom of the tank excavation zone beneath where the fill pipe entered the tank. (2) <p>Samples from excavated soils: Collect the following number of samples from excavated soils and collect them where field instruments indicate contamination is most likely to be present:</p> <table border="1"> <thead> <tr> <th>Cubic Yards of Soil</th> <th>Minimum Number of Samples</th> </tr> </thead> <tbody> <tr> <td>0-25</td> <td>1</td> </tr> <tr> <td>26-50</td> <td>2</td> </tr> <tr> <td>51-100</td> <td>3</td> </tr> <tr> <td>101-500</td> <td>5</td> </tr> </tbody> </table>			Cubic Yards of Soil	Minimum Number of Samples	0-25	1	26-50	2	51-100	3	101-500
Cubic Yards of Soil	Minimum Number of Samples											
0-25	1											
26-50	2											
51-100	3											
101-500	5											

³²⁸ For UST systems in operation, temporarily closed, or undergoing a change-in-service, changed the minimum number of soil samples around tanks from three or five (based on size of tank), to two or more (based on number of tanks in excavation zone).

³²⁹ For UST systems in operation, temporarily closed, or undergoing a change-in-service, increased the minimum number of soil samples around sets of connected dispensers from one to two.

³³⁰ For UST systems undergoing permanent closure in place, changed the minimum number of soil samples around tanks from three or five (based on size of tank), to four or more (based on number of tanks in excavation zone).

³³¹ For UST systems undergoing permanent closure by removal, changed the minimum number of soil samples within tank excavation zone from three or five (based on size of tank), to five.

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	501-1000 1001-2000 >2000	7 10 10 + 1 additional sample for each additional 500 cubic yards of soil		
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Footnotes:

- (1) Horizontal distance:** The specified samples must be collected as close as practicable, but no more than five feet from the applicable tank, pipe, or dispenser.
- (2) Vertical distance:** The specified samples must be collected between one and two feet below the lowest point of the interface between the backfill material and the native soil. If the interface is not discernible, then samples must be collected between one and two feet below the lowest point of the applicable tank, pipe, or dispenser.

WAC 173-360A-740 Reporting and cleanup of spills and overfills

Owners and operators shall ensure that spills and overfills of regulated substances are responded to in accordance with the requirements of this section.

- (1) If a spill or overfill of regulated substances from an UST system results in a release that may pose a threat to human health or the environment,³³² then the release must be reported and cleaned up in accordance with WAC 173-360A-750.
- (2) If a spill or overfill of regulated substances from an UST system does not result in a release or results in a release that does not pose a threat to human health or the environment, then the spill or overfill must be:
 - (a) Immediately contained and cleaned up as follows:
 - (i) Eliminate or reduce any fire, explosive, or vapor hazards resulting from the spill or overfill, and do so in a manner that minimizes the release of regulated substances into the environment;
 - (ii) Prevent the release or further release of regulated substances into the environment and the migration of any substances already released;
 - (iii) Absorb or otherwise contain any free product and properly dispose of the product and any used absorbent materials in accordance with all applicable federal, state, and local requirements. Free product shall not be flushed into storm drains, catch basins, dry wells, monitoring wells, or other locations with a possible connection to surrounding soils, groundwater, or surface water; and
 - (iv) Provide for the proper disposal or treatment of any contaminated soils in accordance with applicable federal, state, and local requirements.
 - (b) Reported within 24 hours if the cleanup required under (a) of this subsection has not been completed.

Note: Other federal, state, and local laws may also require reporting, and in some cases cleanup, of spills and overfills.

³³² To be consistent with the state's cleanup rules in Chapter 173-340 WAC, changed the thresholds for when spills or overfills of petroleum or hazardous substances resulting in releases to the environment must be reported to Ecology and cleaned up under the cleanup rules. Only spills or overfills resulting in releases that may pose a threat to human health or the environment must be reported and cleaned up under the cleanup rules. Other spills and overfills only need to be reported if they are not contained and cleaned up as specified within 24 hours.

WAC 173-360A-750 Reporting and cleanup of confirmed releases

Owners and operators shall ensure that all confirmed releases of regulated substances from UST systems that may pose a threat to human health or the environment,³³³ including those confirmed under WAC 173-360A-720 through 173-360A-740, are responded to in accordance with the requirements of this section.

- (1) Within twenty-four hours of confirming a release, the release must be reported to the department.
- (2) Within twenty-four hours of confirming a release from a tank, the UST system must be secured to prevent further delivery or deposit of regulated substances into the tank that is not authorized by the department.
- (3) Within thirty days of confirming a release, evidence of financial responsibility must be submitted to the department in accordance with WAC 173-360A-1045(2)(a).³³⁴
- (4) Confirmed releases must be investigated and cleaned up in accordance with chapter 173-340 WAC or as otherwise directed by the department under chapter 90.48 RCW.

Note: Other federal, state, and local laws may also require reporting, and in some cases cleanup, of confirmed releases.

³³³ Clarified that only releases that may pose a threat to human health and the environment must be reported to Ecology and cleaned up under the state's cleanup rules in Chapter 173-340 WAC.

³³⁴ Added cross-reference to existing requirement that evidence of financial responsibility must be submitted to department within thirty days of confirming a release.

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Part 8: Closure

Crosswalk of Sections

TOPIC	AMENDED RULE §	CURRENT RULE §	FEDERAL RULE §
Closure	Part 8	Part 3 In Part 2	Subpart G In Subpart K
Temporary closure of UST systems	800	380 In 200(6) In 398	70 In 74 In 252(b)
Permanent closure of UST systems	810	In 385 In 390 In 398	In 71 In 72 In 74
Change-in-service of UST systems	820	In 385 In 390 In 398	In 71 In 72 In 74
Previously closed UST systems	830	395	73 252(e)

WAC 173-360A-800 Temporary closure of UST systems

Owners and operators of temporarily closed UST systems shall ensure compliance with the requirements of this section.

(1) Removing systems from operation.

- (a) Within thirty days of temporarily closing an UST system, the department must be notified using the applicable form provided by the department.
- (b) If an UST system is temporarily closed for more than ninety days, the following actions must be completed and reported to the department within one hundred and twenty days of temporarily closing the system using the applicable form provided by the department:³³⁵
 - (i) Ensure vent lines are open and functioning;
 - (ii) Cap and secure all other lines, pumps, entryways, and ancillary equipment;
 - (iii) Empty the UST system in accordance with subsection (2) of this section, or measure and report on the notification form the amount of regulated substances remaining in the system;³³⁶ and
 - (iv) If there are no UST systems in operation at the UST facility, return the facility compliance tag to the department with the notification form.³³⁷

(2) Emptying systems removed from operation.

- (a) When emptying a temporarily closed UST system, all materials must be removed from the UST system using commonly employed practices. The remaining residue in the tanks must not exceed 2.5 centimeters (one inch).³³⁸
- (b) Within thirty days of emptying a temporarily closed UST system, the department must be notified using the applicable form provided the department. The notice must include documentation that the UST system has been emptied (such as an invoice). This notice may be combined with the notice required under subsection (1)(b) of this section.³³⁹

(3) Maintaining compliance during temporary closure. Except as otherwise provided in this subsection, owners and operators must ensure compliance with all of the applicable

³³⁵ Clarified that, if an UST system is temporarily closed for more than ninety days, then required closure activities must be completed and reported to the department within one hundred and twenty days.

³³⁶ Added requirement that UST systems temporarily closed for more than ninety days must either be emptied or the amount of regulated substance remaining in the system must be measured.

³³⁷ Clarified that facility compliance tags, not active permits, must be returned to Ecology if there are no UST systems in operation at the UST facility, consistent with changes to the authorizing state statute in RCW 90.76.020.

³³⁸ Eliminated "0.3 percent by weight of the total capacity" as a criteria for determining whether an UST system is empty.

³³⁹ Clarified that Ecology must be notified within thirty days of an UST system being emptied (as a change in the status of an UST system).

requirements of this chapter during temporary closure, including maintenance of corrosion protection and payment of annual tank fees.³⁴⁰

- (a) Spill and overfill prevention.** The following operation and maintenance tests and inspections of spill and overfill prevention equipment may be suspended during temporary closure:³⁴¹
- (i) Walkthrough inspections of spill prevention equipment in WAC 173-360A-420;
 - (ii) Tests of spill prevention equipment in WAC 173-360A-460; and
 - (iii) Inspections of overfill prevention equipment in WAC 173-360A-470.
- (b) Release detection and containment.** Release detection in Part 6 of this chapter and the following operation and maintenance tests and inspections of release detection equipment and containment sumps may be suspended during temporary closure if an UST system is emptied in accordance with subsection (2) of this section:³⁴²
- (i) Walkthrough inspections of release detection equipment and containment sumps in WAC 173-360A-420;
 - (ii) Tests of containment sumps used for interstitial monitoring in WAC 173-360A-450; and
 - (iii) Tests of release detection equipment in WAC 173-360A-480.
- (c) Financial responsibility.** Financial responsibility in Part 10 of this chapter may be suspended during temporary closure if:³⁴³
- (i) The UST system is emptied in accordance with subsection (2) of this section; and
 - (ii) After the UST system is emptied, a site assessment around the UST system is completed and reported in accordance with WAC 173-360A-730.
- (4) Permanent closure of non-compliant systems.** Unless the department provides an extension, UST systems temporarily closed more than twelve months must be permanently closed in accordance with WAC 173-360A-810 if the tanks or piping³⁴⁴ do not meet the applicable

³⁴⁰ Clarified that UST systems must comply with all applicable requirements of this chapter, including corrosion protection, during temporary closure (just as if it were in operation), except as otherwise specified in the section.

³⁴¹ Consistent with §280.70(a) of the federal rule, specified that spill and overfill prevention equipment does not need to be operated and maintained during temporary closure.

³⁴² Consistent with §280.70(a) of the federal rule, specified that release detection equipment and containment sumps do not need to be operated and maintained during temporary closure if the UST system is empty.

³⁴³ To be consistent with §280.113 of the federal rule, added requirement that financial responsibility must be maintained during temporary closure. However, unlike the federal rule, specified that financial responsibility does not need to be maintained during temporary closure if the UST system is emptied and a site assessment is completed after the system is emptied.

³⁴⁴ Clarified that UST systems temporarily closed more than twelve months must be permanently closed only if the tanks or piping do not meet applicable performance standards or upgrade requirements.

performance standards or upgrade requirements in Part 3 of this chapter. The department may provide an extension if, before the end of the twelve-month period:

- (a) A site assessment is performed around the UST system in accordance with WAC 173-360A-730; and
- (b) After the site assessment is completed, an extension is requested in writing.

(5) Returning systems to operation. Before returning an UST system to operation, owners and operators must ensure compliance with all of the applicable requirements of this chapter, including any suspended during temporary closure under subsection (3) of this section. If the UST system has been temporarily closed for more than ninety days, owners and operators must also ensure compliance with the additional requirements of this subsection.

(a) Tests and inspections. Before returning an UST system to operation, the following tests and inspections must be performed, as applicable, to ensure the system is operating properly and will prevent releases to the environment.

(i) Tanks and piping. If release detection is suspended during temporary closure, tanks and piping must be tightness tested in accordance with WAC 173-360A-635 and 173-360A-650. This requirement does not apply to suction piping meeting the standards in WAC 173-360A-600(1)(b)(i) through (v). The department must authorize any delivery or deposit of regulated substances necessary to perform the tightness test. To request such authorization, submit the applicable form provided by the department.³⁴⁵ Authorization will not be provided unless:

- (A) A preliminary evaluation of the structural integrity of the tanks is performed and reported on the request form;³⁴⁶ and
- (B) Proof of financial responsibility for the UST system is included with the request form.

(ii) Spill and overfill prevention. The following operation and maintenance tests and inspections of spill and overfill prevention equipment must be performed if suspended (scheduled, but not performed) during temporary closure:

- (A) Walkthrough inspections of spill prevention equipment in WAC 173-360A-420;
- (B) Testing of spill prevention equipment in WAC 173-360A-460; and

³⁴⁵ Clarified how to obtain Ecology's authorization for a one-time delivery or deposit of regulated substances needed to perform a tank tightness test.

³⁴⁶ Added requirement that a preliminary evaluation of the structural integrity of a tank must be completed before Ecology will authorize deposit of regulated substances needed for a tightness test of an empty temporarily closed UST system.

- (C) Inspections of overfill prevention equipment in WAC 173-360A-470.³⁴⁷
- (iii) **Release detection and containment.** The following operation and maintenance tests and inspections of release detection equipment and containment sumps must be performed if suspended (scheduled, but not performed) during temporary closure:
 - (A) Walkthrough inspections of release detection equipment and containment sumps in WAC 173-360A-420;
 - (B) Tests of containment sumps used for interstitial monitoring in WAC 173-360A-450; and
 - (C) Tests of release detection equipment in WAC 173-360A-480.³⁴⁸
- (b) **Financial responsibility.** If financial responsibility under Part 10 of this chapter is suspended during temporary closure, financial responsibility for the UST system must be demonstrated to the department before any regulated substances are delivered or deposited into the UST system, including a one-time delivery or deposit necessary to perform the tightness tests required under (a)(i) of this subsection.
- (c) **Notification.** Within thirty days of returning a temporarily closed UST system to operation, the department must be notified using the applicable form provided by the department. The following must be included with the notification form:
 - (i) The completed checklists of any UST system services required to return the system to operation; and
 - (ii) Proof of financial responsibility for the UST system.³⁴⁹
- (d) **Reissuance of facility compliance tag.** Upon receipt of the completed notification required under (c) of this subsection, the department will reissue a facility compliance tag for the UST facility if returned under subsection (1)(b)(iv) of this section.

³⁴⁷ For UST systems temporarily closed more than ninety days, added requirement that any operation and maintenance tests or inspections of spill or overfill prevention equipment suspended during temporary closure must be performed before returning an UST system to operation.

³⁴⁸ For UST systems temporarily closed more than ninety days, added requirement that any operation and maintenance tests or inspections of release detection equipment or containment sumps suspended during temporary closure must be performed before returning an UST system to operation.

³⁴⁹ Clarified requirements for notifying Ecology after returning an UST system temporarily closed more than ninety days to operation.

WAC 173-360A-810 Permanent closure of UST systems

When UST systems, or tanks or piping that are part of an UST system,³⁵⁰ undergo permanent closure, owners and operators shall ensure compliance with the requirements of this section.

- (1) Notice.** Owners and operators shall notify the department of their intent to permanently close an UST system, or a tank or piping run that is part of an UST system, at least thirty days before starting permanent closure. The notice must be provided using the applicable form provided by the department. The department must also be notified of any change to the planned start date at least three business days before starting permanent closure.³⁵¹
- (2) Deadline.** Permanent closure must be completed within ninety days of the department's receipt of the notification form required under subsection (1) of this section unless a written request for an extension, explaining the reason for the request, is submitted to the department within the ninety days.³⁵²
- (3) Decommission.** When an UST system, or a tank or piping run that is part of an UST system, undergoes permanent closure, it must be decommissioned in accordance with the requirements of this subsection.
 - (a) Actions.** To decommission an UST system, or a tank or piping run, undergoing permanent closure, the following actions must be completed, as applicable:
 - (i) Tanks must be emptied and cleaned by removing all liquids and accumulated sludge;
 - (ii) Piping must be emptied by removing all liquids;
 - (iii) Tanks must be removed from the ground or closed in place by filling with an inert solid material;
 - (iv) Piping must be removed from the ground or closed in place by capping; and
 - (v) Any sludge removed from the tanks or piping must be designated and disposed of in accordance with all applicable federal, state, and local requirements.
 - (b) Performance.** Decommissioning must be performed:
 - (i) By or under the direct supervision of a service provider certified in accordance with Part 9 of this chapter; and

³⁵⁰ Clarified that permanent closure requirements apply to circumstances when only a portion of an UST system (tank or piping run) is being closed.

³⁵¹ Added requirement that Ecology must be notified of any change in the planned start date for permanent closure at least three business days before starting.

³⁵² Eliminated requirement that Ecology must approve extension to ninety-day deadline for completing permanent closure within the ninety-day period.

- (ii) In accordance with a code of practice. The following codes of practice may be used to meet this requirement:³⁵³
 - (A) American Petroleum Institute, Recommended Practice 1604, “Closure of Underground Petroleum Storage Tanks”;
 - (B) American Petroleum Institute, Standard 2015, “Safe Entry and Cleaning of Petroleum Storage Tanks, Planning and Managing Tank Entry from Decommissioning through Recommissioning”;
 - (C) American Petroleum Institute, Recommended Practice 2016, “Guidelines and Procedures for Entering and Cleaning Petroleum Storage Tanks”;
 - (D) American Petroleum Institute, Recommended Practice 1631, “Interior Lining and Periodic Inspection of Underground Storage Tanks”;
 - (E) National Fire Protection Association, Standard 326, “Standard for the Safeguarding of Tanks and Containers for Entry, Cleaning, or Repair”;
 - and
 - (F) National Institute for Occupational Safety and Health, Publication 80-106, “Criteria for a Recommended Standard: Working in Confined Spaces.”
- (c) **Reporting.** Decommissioning must be certified and reported in accordance with WAC 173-360A-230(3)(b).³⁵⁴
- (4) **Site assessment.** When an UST system, or a tank or piping run that is part of an UST system, undergoes permanent closure, a site assessment must be conducted around the system or the part of the system being closed in accordance with WAC 173-360A-730.³⁵⁵
- (5) **Return of facility compliance tag.** If there are no UST systems in operation at the UST facility, the facility compliance tag must be returned to the department with the checklist required under subsection (3)(c) of this section.³⁵⁶

³⁵³ Consistent with §280.71(c) of the federal rule, updated the codes of practices that may be used to comply with decommissioning requirements.

³⁵⁴ Eliminated requirement that permanent closure records must be maintained since such records must be submitted to Ecology.

³⁵⁵ Eliminated exception to site assessment requirement in cases where vapor or groundwater monitoring is used as a release detection method and monitoring does not indicate a release.

³⁵⁶ Clarified that facility compliance tags (not permits) must be returned to Ecology if there are no UST systems in operation at the facility, consistent with changes to the authorizing state statute in RCW 90.76.020.

WAC 173-360A-820 Change-in-service of UST systems

When UST systems undergo a change-in-service, owners and operators shall ensure compliance with the requirements of this section.

- (1) Notice.** Owners and operators shall notify the department of their intent to undertake a change-in-service of an UST system at least thirty days before starting the change-in-service. The notice must be provided using the applicable form provided by the department. The department must also be notified of any change to the planned start date at least three business days before starting the change-in-service.³⁵⁷
- (2) Deadline.** A change-in-service must be completed within ninety days of the department’s receipt of the notification form required under subsection (1) of this section unless a written request for an extension, explaining the reason for the request, is submitted to the department within the ninety days.³⁵⁸
- (3) Decommission.** When an UST system undergoes a change-in-service, the system must be decommissioned in accordance with the requirements of this subsection.

 - (a) Actions.** To decommission an UST system undergoing a change-in-service, the following actions must be completed, as applicable:

 - (i) Tanks must be emptied and cleaned by removing all liquids and accumulated sludge;
 - (ii) Piping must be emptied of all liquids; and
 - (iii) Any sludge removed from the tanks or piping must be designated and disposed of in accordance with all applicable federal, state, and local requirements.
 - (b) Performance.** Decommissioning must be performed:

 - (i) By or under the direct supervision of a service provider certified in accordance with Part 9 of this chapter; and
 - (ii) In accordance with a code of practice. The following codes of practice may be used to meet this requirement:³⁵⁹

 - (A) American Petroleum Institute, Recommended Practice 1604, “Closure of Underground Petroleum Storage Tanks”;

³⁵⁷ Added requirement that Ecology must be notified of any change in the planned start date for a change-in-service at least three business days before starting.

³⁵⁸ Eliminated requirement that Ecology must approve extension to ninety-day deadline for completing permanent closure with the ninety-day period.

³⁵⁹ Consistent with §280.71(c) of the federal rule, updated the codes of practices that may be used to comply with decommissioning requirements.

- (B) American Petroleum Institute, Standard 2015, “Safe Entry and Cleaning of Petroleum Storage Tanks, Planning and Managing Tank Entry from Decommissioning through Recommissioning”;
 - (C) American Petroleum Institute, Recommended Practice 2016, “Guidelines and Procedures for Entering and Cleaning Petroleum Storage Tanks”;
 - (D) American Petroleum Institute, Recommended Practice 1631, “Interior Lining and Periodic Inspection of Underground Storage Tanks”;
 - (E) National Fire Protection Association, Standard 326, “Standard for the Safeguarding of Tanks and Containers for Entry, Cleaning, or Repair”;
and
 - (F) National Institute for Occupational Safety and Health, Publication 80-106, “Criteria for a Recommended Standard: Working in Confined Spaces.”
- (c) **Reporting.** Decommissioning must be certified and reported in accordance with WAC 173-360A-230(3)(b).³⁶⁰
- (4) **Site assessment.** When an UST system undergoes a change-in-service, a site assessment must be performed around the system in accordance with WAC 173-360A-730.³⁶¹
- (5) **Return of facility compliance tag.** If there are no UST systems in operation at the UST facility, the facility compliance tag must be returned to the department with the checklist required under subsection (3)(c) of this section.³⁶²

³⁶⁰ Eliminated requirement that change-in-service records must be maintained since such records must be submitted to Ecology.

³⁶¹ Eliminated exception that site assessments are not required upon change-in-service when vapor or groundwater monitoring is used as a release detection method and monitoring does not indicate a release.

³⁶² Clarified that facility compliance tags (not permits) must be returned to Ecology if there are no UST systems in operation at the facility, consistent with changes to the authorizing state statute in RCW 90.76.020.

WAC 173-360A-830 **Previously closed UST systems**

When directed by the department, owners and operators of the following UST systems must permanently close the systems in accordance with WAC 173-360A-810 if the department determines releases from the systems may pose a current or potential threat to human health or the environment or if any additional closure activities are performed³⁶³:

- (1) UST systems permanently closed before December 22, 1988; and
- (2) UST systems with field-constructed tanks or airport hydrant systems permanently closed before [effective date of rule].³⁶⁴

³⁶³ Clarified that UST systems closed before becoming subject to regulation must be permanently closed in accordance with requirements in this chapter if any additional closure activities are performed, such as removal.

³⁶⁴ Consistent with §280.252(e) of the federal rule, added previously deferred UST systems closed before effective date of rule to those systems that must comply with the requirements governing previously closed UST systems.

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Part 9: Service Providers

Crosswalk of Sections

TOPIC	AMENDED RULE §	CURRENT RULE §	FEDERAL RULE §
Service providers	Part 9	Part 6	--
Purpose and applicability	900	In 600 610	--
General requirements	910	620 630(1), (2), (4), (5)	--
Performance of services	920	620 630(4)	280.45(a) ³⁶⁵
Certification of service providers	930	In 600 620	280.45(a)
Responsibilities of service providers	940	630 670	--

³⁶⁵ The federal rule amendments specify that site evaluations required before using vapor or groundwater monitoring as a release detection method must be signed by a professional engineer or geologist, or equivalent licensed professional with relevant experience.

WAC 173-360A-900 Purpose and applicability

- (1) This Part establishes a certification program for service providers, specifies the responsibilities of services providers, and identifies which services on UST systems must be performed by certified service providers. The certification program is designed to ensure that the services performed on UST systems are performed safely and in a manner that will protect human health and the environment.
- (2) The requirements of this Part apply to any services performed on an UST system requiring the use of a service provider under this chapter.
- (3) The applicability of this Part does not affect the applicability of any other legally applicable licensing requirements or manufacturer certification requirements.

WAC 173-360A-910 General requirements

Owners and operators shall ensure that:

- (1) UST system services are performed by or under the direct supervision³⁶⁶ of a service provider who is certified to perform the services in accordance with WAC 173-360A-920 and 173-360A-930;
- (2) UST system services are performed in accordance with the requirements of this chapter and any other legally applicable requirements;
- (3) UST system services are reported in accordance with WAC 173-360A-230(3)(b); and
- (4) Records of UST system services are maintained in accordance with WAC 173-360A-240.

³⁶⁶ Clarified that UST system services may be performed by or under the direct supervision of a service provider. Made clarification throughout rule.

WAC 173-360A-920 Performance of services

Owners and operators shall ensure that UST system services are performed by or under the direct supervision of a service provider certified in accordance with the requirements of this section. Table 920-1 identifies the UST system services requiring the use of a service provider and the certification that a service provider must have to perform those services.³⁶⁷ There are six types of certification. Some UST system services require more than one type of certification (such as installation and repair of cathodic protection systems). Some UST system services may be performed by more than one type of service provider (such as inspections of overfill prevention equipment).

Table 920-1: Type of certification required to perform UST system services

UST system service	Service requirements	Certification required
Services not involving corrosion protection		
Installing UST systems or components, except cathodic protection	WAC 173-360A-300	Installation/repair
Performing internal inspections of tanks	WAC 173-360A-440 and/or 173-360A-490	Installation/repair
Tightness testing of containment sumps used for interstitial monitoring ³⁶⁸	WAC 173-360A-450	Tightness testing or Installation/repair
Tightness testing of spill prevention equipment ³⁶⁹	WAC 173-360A-460	Tightness testing or Installation/repair
Inspecting overfill prevention equipment ³⁷⁰	WAC 173-360A-470	Tightness testing or Installation/repair
Testing of electronic or mechanical release detection equipment ³⁷¹	WAC 173-360A-480	Tightness testing or Installation/repair
Repairing UST systems or components, except cathodic protection	WAC 173-360A-490	Installation/repair

(continued next page)

³⁶⁷ Clarified which UST system services require a service provider (which is also specified throughout the chapter) and the types of certification required to perform those services.

³⁶⁸ Specified that testing of containment sumps used for interstitial monitoring must be performed by a service provider certified in tightness testing or installation/repair.

³⁶⁹ Specified that testing of spill prevention equipment must be performed by a service provider certified in tightness testing or installation/repair.

³⁷⁰ Specified that testing of release detection equipment must be performed by a service provider certified in tightness testing or installation/repair.

³⁷¹ Specified that inspections of overfill prevention equipment must be performed by a service provider certified in tightness testing or installation/repair.

UST system service	Service requirements	Certification required
Services not involving corrosion protection (continued)		
Tightness testing of secondary containment areas of tanks or piping used for interstitial monitoring ³⁷²	WAC 173-360A-490(6)	Tightness testing or Installation/repair
Tightness testing of tanks	WAC 173-360A-635	Tightness testing
Tightness testing of piping	WAC 173-360A-650	Tightness testing
Site evaluations required to use vapor or groundwater monitoring as a release detection method ³⁷³	WAC 173-360A-660 or 173-360A-665	Site assessment
Site assessments, including site checks	WAC 173-360A-730	Site assessment
Decommissioning tanks or piping undergoing permanent closure or a change-in-service	WAC 173-360A-810(3) or 173-360A-820(3)	Decommissioning
Services involving corrosion protection³⁷⁴		
Designing cathodic protection systems	WAC 173-360A-310(3)	Corrosion expert
Installing cathodic protection systems designed by corrosion expert ³⁷⁵	WAC 173-360A-300	Installation/repair, and either corrosion expert or cathodic protection tester
Testing cathodic protection systems	WAC 173-360A-430(2)	Corrosion expert or cathodic protection tester
Evaluating cathodic protection systems that are inadequately protecting tanks or piping based on results of cathodic protection tests or rectifier inspections	WAC 173-360A-430 and 173-360A-490	Corrosion expert
Specifying field surveys to be performed before installing or repairing cathodic protection systems	WAC 173-360A-300 or 173-360A-490	Corrosion expert
Performing field surveys specified by corrosion expert	WAC 173-360A-300 or 173-360A-490	Corrosion expert or cathodic protection tester

³⁷² Specified that testing of secondary containment areas of tanks or piping used for interstitial monitoring must be performed by a service provider certified in tightness testing or installation/repair.

³⁷³ Clarified that site evaluations required to use vapor or groundwater monitoring as a release detection method must be performed by a service provider certified in site assessment.

³⁷⁴ Clarified which UST system services involving corrosion protection require a corrosion expert as opposed to a cathodic protection tester.

³⁷⁵ Clarified that installation of cathodic protection systems requires certification in both installation/repair and as a corrosion expert or cathodic protection tester.

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UST system service	Service requirements	Certification required
Services involving corrosion protection (continued)		
Evaluating results of field surveys	WAC 173-360A-300 or 173-360A-490	Corrosion expert
Evaluating results of internal inspections of metal tanks for corrosion	WAC 173-360A-440 and/or 173-360A-490	Corrosion expert
Designing repairs of cathodic protection systems, including specifying rectifier adjustments	WAC 173-360A-310(3)	Corrosion expert
Repairing cathodic protection systems, including making rectifier adjustments, designed by corrosion expert ³⁷⁶	WAC 173-360A-490	Installation/repair, and either corrosion expert or cathodic protection tester

³⁷⁶ Clarified that repairs of cathodic protection systems requires certification in both installation/repair and as a corrosion expert or cathodic protection tester.

WAC 173-360A-930 Certification of service providers

Owners and operators shall ensure that service providers performing UST system services are certified in accordance with the requirements of this section.

- (1) Installation and repair.** To perform or directly supervise UST system services requiring certification in installation and repair, a service provider must be certified as having sufficient education and experience by:

 - (a) The International Code Council;³⁷⁷
 - (b) Another nationally or internationally recognized association approved by the department that provides a qualifying examination; or
 - (c) Passing another qualifying examination approved by the department.
- (2) Tightness testing.** To perform or directly supervise UST system services requiring certification in tightness testing, a service provider must be certified as having sufficient education and experience by:

 - (a) The International Code Council;
 - (b) Another nationally or internationally recognized association approved by the department that provides a qualifying examination; or
 - (c) Passing another qualifying examination approved by the department.
- (3) Site assessment.** To perform or directly supervise UST system services requiring certification in site assessment, a service provider must be certified as having sufficient education and experience by:

 - (a) The International Code Council;
 - (b) Another nationally or internationally recognized association approved by the department that provides a qualifying examination;
 - (c) Passing another qualifying examination approved by the department; or
 - (d) Being licensed as a professional engineer or hydrogeologist³⁷⁸ in Washington state under chapter 18.43 or 18.220 RCW and being able to demonstrate competence in site assessment by means of examination, experience, or education.
- (4) Decommissioning.** To perform or directly supervise UST system services requiring certification in decommissioning, a service provider must be certified as having sufficient education and experience by:

³⁷⁷ Updated reference to International Code Council throughout this Part.

³⁷⁸ Consistent with §280.45(a) of the federal rule, added being licensed as a professional hydrogeologist in Washington state as a method of being certified as a site assessor, provided the person is able to demonstrate competence in site assessment by means of examination, experience, or education.

- (a) The International Code Council;
 - (b) Another nationally or internationally recognized association approved by the department that provides a qualifying examination; or
 - (c) Passing another qualifying examination approved by the department.
- (5) Corrosion expert.** To perform or directly supervise UST system services requiring certification as a corrosion expert, as defined in WAC 173-360A-150, a service provider must be certified as having sufficient education and experience by:
- (a) The National Association of Corrosion Engineers;
 - (b) Another nationally or internationally recognized association approved by the department that provides a qualifying examination;
 - (c) Passing another qualifying examination approved by the department; or
 - (d) Being licensed as a professional engineer in Washington state under chapter 18.43 RCW and certified as cathodic protection tester under subsection (6) of this section.
- (6) Cathodic protection testing.** To perform or directly supervise UST system services requiring certification as a cathodic protection tester, as defined in WAC 173-360A-150, a service provider must be certified as having sufficient education and experience by:
- (a) The International Code Council;
 - (b) The National Association of Corrosion Engineers;
 - (c) The Steel Tank Institute;³⁷⁹
 - (d) Another nationally or internationally recognized association approved by the department that provides a qualifying examination; or
 - (e) Passing another qualifying examination approved by the department.

³⁷⁹ Added certification by the Steel Tank Institute as a method of being certified as a cathodic protection tester.

WAC 173-360A-940 Responsibilities of service providers

Service providers shall comply with the requirements of this section.

(1) Certification and records.

- (a) Service providers must be certified to perform or directly supervise the performance of UST system services in accordance with WAC 173-360A-920 and 173-360A-930.
- (b) Service providers shall maintain proof that they are certified to perform or directly supervise the performance of UST system services under WAC 173-360A-920 and 173-360A-930, such as licenses or certificates, and make such proof available for inspection upon request by the department.

(2) Performance of services. Services providers shall perform or directly supervise the performance of UST system services in accordance with the requirements of this chapter and any other legally applicable requirements, including:

- (a) Chapter 18.27 RCW and chapter 296-200A WAC, which apply to individuals who are general and specialty contractors;
- (b) Chapter 18.104 RCW and chapter 173-162 WAC, which apply to individuals who install groundwater monitoring wells;
- (c) Chapter 19.28 RCW, chapters 296-46B, which apply to individuals who install and repair impressed current cathodic protection systems; and
- (d) Chapter 49.17 RCW and chapter 296-62 WAC, which apply to individuals engaged in activities involving hazardous chemicals and substances and who perform confined space entry during field activities, and chapter 296-155 WAC, which sets forth safety standards for construction work.³⁸⁰

(3) Presence during services. Service providers must be present at the UST facility when and where UST system services are performed, including during the activities specified in this subsection.

- (a) When installing tanks or piping, services providers must be present when:
 - (i) Preparing the excavation zone immediately before receiving backfill and placing the tanks or piping into the excavation zone;
 - (ii) Any movement of the tanks at the UST facility, including transferring the tanks from the vehicle used to transport them to the facility;
 - (iii) Setting the tanks or piping into the excavation zone, including placing any anchoring devices or strapping, and backfilling to the level of the tank or piping;
 - (iv) Placing and connecting the piping to tanks or dispensers;

³⁸⁰ Incorporated into the rule and updated references to other legally applicable requirements that may apply to the performance of UST system services.

- (v) Pressure testing the tanks or piping during installation; and
 - (vi) Completing the backfill and filling of the excavation zone.
- (b) When performing site assessments around tanks or piping runs undergoing permanent closure, service providers must be present when the tanks or piping are removed from the ground.³⁸¹
- (c) When decommissioning tanks or piping runs undergoing permanent closure or a change-in-service, services providers must be present when:
- (i) Purging or inerting the tanks or piping;
 - (ii) Excavating around the tanks or piping before removal;
 - (iii) Removing the tanks from the excavation zone;
 - (iv) Removing or capping the piping;
 - (v) Cleaning the tanks, including removing and disposing of any accumulated sludge; and
 - (vi) Any movement of the tanks at the UST facility, including transferring tanks to the vehicle used to transport them from the facility.
- (4) Reporting of services.** Service providers shall certify and report UST system services in accordance with WAC 173-360A-230(3)(b).
- (5) Reporting non-compliance.** If a service provider determines that an UST system for which they are providing services does not have a facility compliance tag displayed or is otherwise not in compliance with the requirements of this chapter, then the service provider shall notify the owner or operator of the determination within twenty-four hours.³⁸²
- (6) Reporting confirmed releases.** If a service provider confirms that a release from an UST system has occurred and determines that the release may pose a threat to human health or the environment, then the service provider shall notify:
- (a) The owner or operator of the UST system immediately; and
 - (b) The department within twenty-four hours.³⁸³ However, if an owner or operator of the UST system is not immediately available, the service provider shall notify the department immediately.

³⁸¹ Added requirement that, when site assessments are performed around tanks or piping undergoing permanent closure, service providers must be present when and where the tanks or piping are removed from the ground.

³⁸² Clarified how quickly service providers must report non-compliance to owners or operators (within 24 hours).

³⁸³ Changed deadline for service providers to report confirmed releases to Ecology from within 72 hours to within 24 hours to make consistent with reporting requirements for owners and operators.

- (7) Enforcement and penalties.** Service providers who violate the requirements of this chapter or submit false information under this chapter are subject to enforcement and civil penalties under WAC 173-360A-270 and 173-360A-290.