



DEPARTMENT OF
ECOLOGY
State of Washington

**MTCA Cleanup Rulemaking
Chapter 173-340 WAC
Preliminary Draft**

Section 450

January 16, 2020

Purpose of this document:

This document provides a preliminary draft of Ecology's proposed changes to Section 450 of Chapter 173-340 WAC, Model Toxics Control Act (MTCA) Cleanup Regulations, for review and consideration by the Stakeholder & Tribal Advisory Group (STAG) in advance of the January 30, 2020, STAG meeting. The document also includes background information and a list of questions that Ecology would like STAG members to consider when reviewing the preliminary draft to facilitate discussions at the meeting.

For more information about the cleanup rulemaking:

Visit Ecology's website at <http://www.ecy.wa.gov/programs/tcp/regs/wac173360/1602inv.html>.

For more information about the Stakeholder & Tribal Advisory Group:

Visit Ecology's website at https://www.ezview.wa.gov/site/alias_1988/37514/overview.aspx.

Contact information:

Clint Stanovsky
Department of Ecology
P.O. Box 47600, Olympia, WA 98504-7600
360-407-7382
MTCARule@ecy.wa.gov

Accommodation requests:

To request ADA accommodation including materials in a format for the visually impaired, call Ecology's Toxics Cleanup Program at 360-407-7170. Persons with impaired hearing may call Washington Relay Service at 711. Persons with speech disability may call TTY at 877-833-6341.

Table of Contents

Acronyms and Abbreviations	ii
Background	1
Cleanup process	2
Cleanup of releases from UST systems	2
Role of the Pollution Liability Insurance Agency.....	2
Contaminated sites and cleanup status.....	3
Overview of Proposed Changes	5
Questions for Stakeholder & Tribal Advisory Group Members	9
Questions about Section 450: Releases from underground storage tanks	10
Questions about economic impacts	11
Preliminary Draft of Proposed Rule	13
WAC 173-340-200 Definitions [additions]	14
WAC 173-340-450 Releases from regulated underground storage tank systems.	15
Current Rule	21
WAC 173-340-450 Releases from underground storage tanks.	22
References	27

Acronyms and Abbreviations

Acronym or Abbreviation	Definition
CSL	Contaminated Sites List
EPA	United States Environmental Protection Agency
LUST	Leaking Underground Storage Tank
MTCA	Model Toxics Control Act
PLIA	Pollution Liability Insurance Agency
PTAP	Petroleum Technical Assistance Program
RCRA	Resource Conservation and Recovery Act
RCW	Revised Code of Washington
STAG	Stakeholder & Tribal Advisory Group
TCP	Toxics Cleanup Program
UST	Underground Storage Tank
VCP	Voluntary Cleanup Program
WAC	Washington Administrative Code

Background

Cleanup process

The basic steps of the cleanup process for contaminated sites under the Model Toxics Control Act (MTCA) were established in 1990 and included in Chapter [173-340](#) WAC (Cleanup Rule). These are:

1. Site discovery and reporting
2. Initial investigation
3. Site hazard assessment
4. Hazard ranking
5. Remedial investigation/feasibility study
6. Cleanup action selection
7. Site cleanup

Read more about the [cleanup process](#).

Cleanup of releases from UST systems

Under [Chapter 90.76 RCW](#), the Department of Ecology (Ecology) regulates and periodically inspects underground storage tank (UST) systems that store petroleum and other regulated hazardous substances to prevent releases into the environment. The [state program](#) must meet [federal requirements](#) for state program approval and be consistent with and no less stringent than the [federal program](#) established by the U.S. Environmental Protection Agency under the Resource Conservation and Recovery Act (RCRA). The federal requirements governing cleanup are specified in [40 C.F.R. Sec. 281.35](#).

The state regulates UST systems under Chapter [173-360A](#) WAC. UST system owners and operators must investigate and clean up confirmed releases from regulated UST systems in accordance with the MTCA Cleanup Regulation, Chapter [173-340](#) WAC. See WAC [173-360A-0750\(4\)](#).

UST system owners and operators must comply with the requirements in WAC [173-340-450](#) in addition to the other requirements in Chapter 173-340 WAC. Section 450 specifies initial response actions that UST system owners and operators must take to reduce and monitor the threats posed by the release and to characterize the nature and extent of contamination from the release. Once the UST-specific requirements in Section 450 are completed, the cleanup process is the same as for any other contaminated site.

If an UST system owner or operator violates any requirement of Chapter 173-340 WAC, including Section 450, Ecology may take enforcement action under either the cleanup law, Chapter [70.105D](#) RCW, or the UST law, Chapter 90.76 RCW. While Ecology may issue orders under both laws, Ecology may only issue civil penalties or prohibit delivery to an UST system under the UST law.

Role of the Pollution Liability Insurance Agency

The [Pollution Liability Insurance Agency](#) (PLIA) provides financial assistance to UST system owners and operators for cleaning up leaking underground storage tank (LUST) sites through its [Commercial UST Reinsurance Program](#) and its [UST Loan and Grant Program](#). Currently, PLIA reinsures 80% of the USTs in Washington. PLIA also provides technical assistance to persons who independently clean up LUST sites under its [Petroleum Technical Assistance Program \(PTAP\)](#). Currently, 243 sites are enrolled in PTAP.

Contaminated sites and cleanup status

As of August 21, 2019, 13,331 contaminated sites have been identified in Washington. 7,190 of those sites (about 54%) have been successfully cleaned up. Cleanup is currently underway at another 4,030 sites (about 30%).

6,712 (50%) of Washington's contaminated sites are leaking underground storage tank (LUST) sites. 3,949 of those LUST sites (about 59%) have been successfully cleaned up. Cleanup is currently underway at another 2,502 LUST sites (about 37%).

New sites are continuously being reported to Ecology, many the result of Phase I environmental assessments. In 2018 alone, 407 new sites were reported to Ecology, 88 of which were LUST sites. During the same period, 196 sites were successfully cleaned up, 88 of which were LUST sites.

This page is purposely left blank.

Overview of Proposed Changes

Purpose of Changes

As part of this rulemaking, Ecology is not proposing changes to its overall strategy for getting releases from regulated UST systems cleaned up. However, Ecology is proposing several changes to help accelerate the investigation and cleanup of such releases. The changes are intended to:

- Streamline the existing rule.
- Update outdated parts of the rule.
- Clarify parts of the rule to improve compliance.
- Improve integration of the rule with Chapter 173-360A WAC.
- Update language to align with current rule writing practices.

Overview of Changes

The following is a summary of the proposed changes to Section 450 and related definitions in Section 200 of Chapter 173-340 WAC, Model Toxics Control Act (MTCA) Cleanup Regulations. The proposed changes are also footnoted in the preliminary draft of the rule text.

Section 200 Definitions

- Added definitions for the terms “UST system,” “UST system owner,” and “UST system operator” to clarify applicability of the requirements in WAC 173-340-450. The terms have the same meaning as in the UST Regulations, Chapter 173-360A WAC.

Section 450 Releases from underground storage tanks

- Clarified the applicability of the section. The section applies only to owners and operators of regulated UST systems from which there has been a confirmed release.
- Clarified the limited purpose of the section and eliminated the overview of the steps in the cleanup process. The section only specifies additional requirements for initially responding to releases from UST systems. The other requirements in the chapter still apply. Once the UST-specific requirements in this section are completed, the cleanup process is the same as for any other contaminated site.
- Clarified that if an UST system owner or operator fails to comply with the requirements in this chapter, then they are subject to enforcement not only under Chapter 70.105D RCW, but also under Chapter 90.76 RCW. This includes civil penalties and orders.
- Clarified that the interim actions required in this section may be conducted under any of the procedures described in WAC 173-340-510 and 173-340-515. UST system owners and operators may perform the interim actions independently, with or without technical assistance, or under Ecology supervision. Ecology may also perform the interim actions itself.
- Clarified that all of the required actions specified in this section are interim actions, including the initial response actions required within the first 24 hours after release confirmation.
- Extended the deadline for completing the initial site characterization from 20 days to 30 days after release confirmation.

- Added requirement for investigating vapor intrusion pathways as part of the initial site characterization.
- Clarified the sampling and analysis requirements for the initial site characterization.
- Changed the criteria for when groundwater must be investigated for the presence of contamination and free product as part of the initial site characterization. In particular, the groundwater must be investigated unless it can be demonstrated to Ecology's satisfaction that the release does not pose a threat to groundwater.
- Added 60-day deadline for starting free product recovery.
- Added requirement for quarterly monitoring of free product.
- Added requirement for quarterly reporting of free product monitoring results and removal actions.
- Clarified what must be included in the interim action report.
- Streamlined reporting of interim actions by requiring a single report within 90 days of release confirmation. Eliminated verbal or written status report on initial response actions and site characterization that is currently required within 20 days of release confirmation.
- Added requirement that the interim action report must be updated and submitted to Ecology at least every five years unless the site has been de-listed from the contaminated sites list, Ecology is conducting or supervising remedial action at the site, or the site is enrolled in a technical assistance program.
- Added requirement that the interim action report must include the type of financial assurance mechanism used and, if insurance, then whether a claim has been made on the policy and whether it has been accepted or denied.

This page is purposely left blank.

Questions for Stakeholder & Tribal Advisory Group Members

For the January 30, 2020, meeting of the Stakeholder & Tribal Advisory Group (STAG), we would like you to review the preliminary draft of Section 450 of the Cleanup Rule and come prepared to discuss the following questions. Ecology also welcomes any other comments and questions about the proposed changes. Please submit any written comments on the proposed changes by **March 2, 2020**.

Questions about Section 450: Releases from underground storage tanks

1. Ecology proposes eliminating from Section 450 the overview of steps in the cleanup process following the specified interim actions since UST sites must be cleaned up the same way as every other site. Do you have any concerns with eliminating the overview?

See Section 450(2) in the preliminary draft and Sections 450(6) through (8) in the current rule.

2. Should Ecology require investigation of possible vapor intrusion pathways as part of the initial site characterization?

See Section 450(5)(b) in the preliminary draft.

3. If a release from an UST system has been confirmed, under what circumstances should groundwater be investigated as part of the initial site characterization? Do you have any concerns with the circumstances specified by Ecology?

See Section 450(5)(b)(iii) in the preliminary draft.

4. Should Ecology specify in the rule whether and what type of professional license is required to demonstrate that a release from an UST system does not pose a threat to groundwater?

See Section 450(5)(b)(iii)(E) in the preliminary draft.

5. Should Ecology set a deadline for initiating free product recovery? Is 60 days after release confirmation reasonable?

See Section 450(5)(c) in the preliminary draft.

6. Should Ecology require at least quarterly monitoring and reporting of free product recovery?

See Section 450(5)(c)(iv) and (v) in the preliminary draft.

7. If UST owners and operators are cleaning up a site independently without any technical assistance from Ecology or the Pollution Liability Insurance Agency, should Ecology require them to provide periodic updates on the status of the cleanup and what is known about the hazards posed by the site? If so, how frequently?

See Section 450(7) in the preliminary draft.

Questions about economic impacts

1. What, if any, economic effects might the draft rule changes have on you or your constituents?
2. Can you identify a less burdensome regulatory approach for responding to releases from UST systems that complies with the federal requirements for state program approval in [40 C.F.R. Sec. 281.35](#)?
3. Would the draft rule changes have a disproportionate impact on small businesses or local governments?
4. Would the draft rule changes provide an advantage or disadvantage to Washington businesses compared to businesses in other states?

This page is purposely left blank.

Preliminary Draft of Proposed Rule

IMPORTANT

This part of the document includes a preliminary draft of the proposed changes to Section 450 and related definitions in Section 200 of Chapter 173-340 WAC. **The proposed changes are footnoted in the rule text.** The proposed changes are not tracked using strikeout and underline because the sections were significantly reorganized, making it difficult to review tracked changes.

WAC 173-340-200 **Definitions [additions]**¹

- “**UST system operator**” means the same as “operator” in chapter [173-360A](#) WAC.
- “**UST system owner**” means the same as “owner” in chapter [173-360A](#) WAC.
- “**UST system**” means the same as “UST system” in chapter [173-360A](#) WAC.

¹ Added definitions for the terms “UST system,” “UST system owner,” and “UST system operator” to clarify applicability of the requirements in WAC 173-340-450. The terms have the same meaning as in the UST Regulations, Chapter 173-360A WAC.

WAC 173-340-450 Releases from regulated underground storage tank systems.

- (1) Applicability.**² This section applies only to underground storage tank (UST) systems regulated under chapter [173-360A](#) WAC from which there has been a confirmed release that may pose a threat to human health or the environment. This section applies only to UST system owners and operators. This section does not alter the applicability of requirements in other sections in this chapter.
- (2) Purpose.**³ Under chapter [173-360A](#) WAC, UST system owners and operators must investigate and clean up confirmed releases in accordance with the requirements of this chapter. This section specifies interim actions that UST system owners and operators must perform to reduce threats posed by a release, prevent any further release, and characterize the nature and extent of a release. UST system owners and operators must comply with the requirements in this section in addition to the other requirements in this chapter.
- (3) Enforcement.**⁴ UST system owners and operators who violate any requirement in this chapter are subject to enforcement, including civil penalties and orders, under:

 - (a)** Chapter [70.105D](#) RCW and this chapter; or
 - (b)** Chapter [90.76](#) RCW and chapter [173-360A](#) WAC.
- (4) Administrative options.** The interim actions specified in this section may be conducted under any of the procedures described in WAC [173-340-510](#) and [173-340-515](#).⁵
- (5) Interim actions.** UST owners and operators must perform the following interim actions after confirming a release.

 - (a) Initial response.**⁶ Within twenty-four hours of release confirmation, UST system owners and operators must:

 - (i)** Remove as much of the hazardous substance from the UST system as is possible and necessary to prevent further release to the environment;

² Clarified the applicability of the section. The section applies only to owners and operators of regulated UST systems from which there has been a confirmed release.

³ Clarified the limited purpose of the section and eliminated the overview of the steps in the cleanup process. The section only specifies additional requirements for initially responding to releases from UST systems. The other requirements in the chapter still apply. Once the UST-specific requirements in this section are completed, the cleanup process is the same as for any other contaminated site.

⁴ Clarified that if an UST system owner or operator fails to comply with the requirements in this chapter, then they are subject to enforcement not only under Chapter 70.105D RCW, but also under Chapter 90.76 RCW. This includes civil penalties and orders.

⁵ Clarified that the interim actions required in this section may be conducted under any of the procedures described in WAC 173-340-510 and 173-340-515. UST system owners and operators may perform the interim actions independently, with or without technical assistance, or under Ecology supervision. Ecology may also perform the interim actions itself.

⁶ Clarified that all of the required actions specified in this section are interim actions, including the initial response actions required within the first 24 hours after release confirmation.

- (ii) Eliminate or reduce any fire, explosion, or vapor hazards and do so in a manner that minimizes any release of hazardous substances to surface water and groundwater; and
 - (iii) Visually inspect any aboveground releases or exposed belowground releases and prevent further migration of released hazardous substances into surrounding soils, groundwater, and surface water.
- (b) Initial site characterization.** Within thirty days of release confirmation,⁷ UST system owners and operators must investigate the site to identify the hazardous substances released, the source of the release, the media impacted by the release, and the potential for vapors from contaminated soil or groundwater to enter building, utility vaults, or other structures.⁸ At a minimum, UST system owners and operators must:⁹
 - (i) Develop a sampling and analysis plan meeting the requirements of WAC [173-340-820](#). The sampling and analysis plan must be based on the nature of the stored substance, type of subsurface soils, depth to groundwater, and other factors as appropriate for identifying the presence and source of the release;
 - (ii) Collect, handle, and analyze samples in accordance with the requirements in WAC [173-340-830](#);
 - (iii) Collect samples in the environment where hazardous substances are most likely to be present. UST system owners and operators must investigate groundwater for the presence of hazardous substances and free product if there is evidence of any of the following conditions at the site:¹⁰
 - (A) Contaminated soil is in contact with the groundwater;
 - (B) Contaminated soil extends below the lowest soil sampling depth;
 - (C) Groundwater contamination has been detected or observed (such as sampling results or the presence of a sheen on water in the excavation while removing an UST system);
 - (D) The release has migrated to surface water or wetlands; or
 - (E) There is no evidence of the conditions in (b)(iii)(A) through (D) of this subsection, but UST owners and operators cannot demonstrate to Ecology's satisfaction that the release does not pose a threat to groundwater;

⁷ Extended the deadline for completing the initial site characterization from 20 days to 30 days after release confirmation.

⁸ Added requirement for investigating vapor intrusion pathways as part of the initial site characterization.

⁹ Clarified the sampling and analysis requirements for the initial site characterization.

¹⁰ Changed the criteria for when groundwater must be investigated for the presence of contamination and free product as part of the initial site characterization. In particular, the groundwater must be investigated unless it can be demonstrated to Ecology's satisfaction that the release does not pose a threat to groundwater.

- (iv) Analyze collected samples for the hazardous substances releases from the UST system, including:
 - (A) For petroleum, the substances specified in Table 830-1 based on the product stored; and
 - (B) For other hazardous substances, the substance stored and any likely decomposition by-products; and
 - (v) Conduct any other investigations required by Ecology.
- (c) **Free product removal.** If free product is discovered at the site, as soon as possible but no later than sixty days after release confirmation,¹¹ UST system owners and operators must initiate actions to remove the free product while continuing, as necessary, any other actions required under this section. At a minimum, UST system owners and operators must:
- (i) Conduct free product removal to the maximum extent practicable and in a manner that minimizes the spread of hazardous substances by using recovery and disposal techniques appropriate to the hydrogeologic conditions at the site. At a minimum, the free product removal system must be designed and operated to stop the free product migration;
 - (ii) Properly treat, discharge, or dispose of any hazardous substance, water, sludge or any other materials collected in the free product removal process in compliance with all applicable local, state, and federal regulations and permits;
 - (iii) Handle all flammable products safely to prevent fires and explosions;
 - (iv) Monitor, in accordance with WAC [173-360A-0665\(4\)](#), for the presence of free product at least quarterly,¹² and
 - (v) Submit to Ecology written quarterly progress reports describing the results of the monitoring and free product removal actions. The first report may be combined with the interim action report required under subsection (6) of this section.¹³
- (d) **Continuing obligations.** UST system owners and operators must continue to conduct the following measures to abate hazards at the site while continuing, as necessary, any other action required under this section:
- (i) Monitor and mitigate any additional fire and safety hazards posed by vapors or free product that may have migrated from the UST system into nearby buildings or other structures, such as underground utilities; and

¹¹ Added 60-day deadline for starting free product recovery.

¹² Added requirement for quarterly monitoring of free product.

¹³ Added requirement for quarterly reporting of free product monitoring results and removal actions.

- (ii) Reduce the threat to human health and the environment posed by contaminated soils that are excavated or discovered as a result of investigation or cleanup activities. Treatment, storage, and disposal of soils must be carried out in compliance with all applicable local, state, and federal requirements.
- (6) **Interim action report.** Within ninety days of release confirmation, UST system owners and operators must submit an interim action report to Ecology about the site and nature of the release. This report must comply with the submittal requirements in WAC [173-340-840](#) and include, at a minimum, the following information:¹⁴
 - (a) A summary of the initial response actions required under subsection (5)(a) of this section, and any resulting information and data;¹⁵
 - (b) The results of the initial site characterization required under subsection (5)(b) of this section, and any other investigations conducted at the site, including:
 - (i) The source(s) of the releases;
 - (ii) An explanation of how the releases occurred;
 - (iii) The hazardous substances released, and the estimated quantity of hazardous substances released;
 - (iv) The media contaminated by those releases and, to the extent known, the nature and extent of contamination within those media, and sample locations. If groundwater has not been tested, then UST system owners and operators must include a demonstration that the release does not pose a threat to groundwater;
 - (v) The results of the free product investigation, if applicable; and
 - (vi) To the extent known, the pathways of exposure at the site and the human or ecological receptors affected by the releases;
 - (c) The physical characteristics of the site, including:
 - (i) The location of tax parcels, property boundaries, right-of-ways, and above and below-ground structures;
 - (ii) The geology of the site, including subsurface soil conditions;
 - (iii) The hydrology of the site, including depth to groundwater, direction of groundwater flow, approximate location of wells potentially affected by the release, proximity of the release to and potential for affecting surface water and wetlands, the quality and use of groundwater and surface water;

¹⁴ Clarified what must be included in the interim action report.

¹⁵ Streamlined reporting of interim actions by requiring a single report within 90 days of release confirmation. Eliminated verbal or written status report on initial response actions and site characterization that is currently required within 20 days of release confirmation.

- (iv) The location of underground utilities and other potential conduits for vapor or free product migration; and
- (v) The population and uses of the site and surrounding area;
- (d) Diagrams and cross-sections of the site, as appropriate, reflecting the information required in (b) and (c) of this subsection;
- (e) At sites where investigations indicate free product is present, information on the free product removal efforts, including:
 - (i) Name of the person responsible for implementing the free product removal measures;
 - (ii) The estimated quantity, type, and thickness of free product observed or measured in wells, boreholes and excavations;
 - (iii) The type of free product recovery system used;
 - (iv) If the recovery or monitoring of free product results in any discharges, then:
 - (A) The location of such discharges;
 - (B) The type of treatment applied to, and the effluent quality expected from such discharges; and
 - (C) The steps taken and planned to obtain necessary permits for such discharges; and
 - (v) Disposition of recovered free product and other contaminated materials generated by site investigations and cleanup;
- (f) A description of any other on-going or completed remedial actions, and the results of such actions;
- (g) A description of any planned remedial actions;
- (h) The type of mechanism used to meet the financial responsibility requirements of WAC [173-360A-1045\(2\)\(a\)](#), and if the mechanism is an insurance policy, then:
 - (i) Whether a claim has been made on the policy; and
 - (ii) Whether the insurer has accepted or denied the claim;¹⁶ and
- (i) Any other information required by Ecology.

¹⁶ Added requirement that the interim action report must include the type of financial assurance mechanism used and, if insurance, then whether a claim has been made on the policy and whether it has been accepted or denied.

- (7) Periodic updates on remedial actions.**¹⁷ At least every five years after release confirmation, UST system owners and operators must update the interim action report required under subsection (6) of this section and submit it to Ecology unless:
- (a)** The site has been removed from the contaminated sites list under WAC [173-340-330](#);
 - (b)** Ecology is conducting remedial actions at the site or is supervising remedial actions at the site under an order or decree; or
 - (c)** The site is enrolled in a technical assistance program under WAC [173-340-515\(5\)](#) or chapter [374-80](#) WAC.

¹⁷ Added requirement that the interim action report must be updated and submitted to Ecology at least every five years unless the site has been de-listed from the contaminated sites list, Ecology is conducting or supervising remedial action at the site, or the site is enrolled in a technical assistance program.

Current Rule

WAC 173-340-450 Releases from underground storage tanks.

- (1) Purpose.** The purpose of this section is to set forth the requirements for addressing releases that may pose a threat to human health or the environment from an underground storage tank (UST) regulated under chapter [90.76](#) RCW.

 - (a)** Releases from USTs exempted under chapter [90.76](#) RCW and rules adopted therein are still subject to all other requirements of this chapter.
 - (b)** Unless the department requires otherwise, UST owners and UST operators regulated under chapter [90.76](#) RCW shall comply with the requirements in this section after confirmation of an UST release that may pose a threat to human health or the environment.
- (2) Initial response.** Within twenty-four hours of confirmation of an UST release, the UST owner or the UST operator shall perform the following actions:

 - (a)** Report the UST release to the department and other authorities with jurisdiction, in accordance with rules adopted under chapter [90.76](#) RCW and any other applicable law;
 - (b)** Remove as much of the hazardous substance from the UST as is possible and necessary to prevent further release to the environment;
 - (c)** Eliminate or reduce any fire, explosion or vapor hazards in such a way as to minimize any release of hazardous substances to surface water and groundwater; and
 - (d)** Visually inspect any aboveground releases or exposed belowground releases and prevent the hazardous substance from spreading into surrounding soils, groundwater and surface water.
- (3) Interim actions.**

 - (a)** As soon as possible but no later than twenty days following confirmation of an UST release, the UST owner or the UST operator shall perform the following interim actions:

 - (i)** Continue to monitor and mitigate any additional fire and safety hazards posed by vapors or free product that may have migrated from the UST into structures in the vicinity of the site, such as sewers or basements;
 - (ii)** Reduce the threat to human health and the environment posed by contaminated soils that are excavated or discovered as a result of investigation or cleanup activities. Treatment, storage and disposal of soils must be carried out in compliance with all applicable federal, state and local requirements;
 - (iii)** Test for hazardous substances in the environment where they are most likely to be present. Such testing shall be done in accordance with a sampling and analysis plan prepared under WAC [173-340-820](#). The sample types, sample locations, and measurement methods shall be based on the nature of the stored substance, type of subsurface soils, depth to groundwater and other factors as appropriate for identifying the presence and source of the release. If

contaminated soil is found in contact with the groundwater or soil contamination appears to extend below the lowest soil sampling depth, then testing shall include the installation of groundwater monitoring wells to test for the presence of possible groundwater contamination. Information gathered for the site check or closure site assessment conducted under rules adopted under chapter [90.76](#) RCW, which sufficiently characterizes the releases at the site, may be substituted for the testing required under this paragraph;

- (iv) The testing performed under (a)(iii) of this subsection shall use the analytical methods specified in WAC [173-340-830](#) and include, at a minimum, the following:
 - (A) For petroleum product releases, the concentration(s) of hazardous substances potentially present at the site, as appropriate for the type of petroleum product(s) released. The minimum testing requirements are specified in Table 830-1.
 - (B) The hazardous substance stored and any likely decomposition by-products where a hazardous substance other than petroleum may be present; and
 - (C) Any other tests required by the department; and
- (v) Investigate for the presence of free product.

(4) **Free product removal.** At sites where investigations indicate free product is present, the UST owner or the UST operator shall conduct, as soon as possible after discovery, an interim action to remove the free product while continuing, as necessary, any other actions required under this section. To accomplish this the UST owner or UST operator shall:

- (a) Conduct free product removal to the maximum extent practicable and in a manner that minimizes the spread of hazardous substances, by using recovery and disposal techniques appropriate to the hydrogeologic conditions at the site. The objective of free product removal system must be, at a minimum, to stop the free product migration;
- (b) Properly treat, discharge, or dispose of any hazardous substance, water, sludge or any other materials collected in the free product removal process in compliance with all applicable local, state, and federal regulations and permits; and
- (c) Handle all flammable products safely to prevent fires and explosions.

(5) **Reporting requirements.** The following reports are required to be submitted to the department:

- (a) **Status report.** Within twenty days after an UST release, the UST owner or UST operator shall submit a status report to the department. The status report shall identify if known, the types, amounts, and locations of hazardous substances released, how the release occurred, evidence confirming the release, actions taken under subsections (2) and (3) of this section, any planned remedial actions, and any results of work done up to the time of the report. This report may be provided verbally to the department.

- (b) Site characterization reports.** Within ninety days after release confirmation, unless directed to do otherwise by the department, the UST owner or UST operator shall submit a report to the department about the site and nature of the release. This report shall be submitted to the department in writing and may be combined with the twenty-day status report, if the information required is available at that time. The site characterization report shall include, at a minimum, the following information:
- (i)** The information required for the status report under (a) of this subsection;
 - (ii)** A site conditions map indicating approximate boundaries of the property, all areas where hazardous substances are known or suspected to be located, and sampling locations. This map may consist of a sketch of the site at a scale sufficient to illustrate this information;
 - (iii)** Available data regarding surrounding populations, surface and groundwater quality, use and approximate location of wells potentially affected by the release, subsurface soil conditions, depth to groundwater, direction of groundwater flow, proximity to and potential for affecting surface water, locations of sewers and other potential conduits for vapor or free product migration, surrounding land use, and proximity to sensitive environments;
 - (iv)** Results of tests for hazardous substances performed under subsection (3)(a)(iii) and (iv) of this section;
 - (v)** Results of the free product investigation required under subsection (3)(a)(v) of this section;
 - (vi)** Results of all completed site investigations, interim actions and cleanup actions and a description of any remaining investigations, cleanup actions and compliance monitoring that are planned or underway; and
 - (vii)** Information on the free product removal efforts at sites where investigations indicate free product is present. This shall include, at a minimum, the following information:
 - (A)** Name of the person responsible for implementing the free product removal measures;
 - (B)** The estimated quantity, type, and thickness of free product observed or measured in wells, boreholes and excavations;
 - (C)** The type of free product recovery system used;
 - (D)** The location of any on-site or offsite discharge during the recovery operation;
 - (E)** The type of treatment applied to, and the effluent quality expected from, any discharge;

(F) The steps taken and planned to obtain necessary permits for any discharge;

(G) Disposition of recovered free product; and

(viii) Any other information required by the department.

(6) Remedial investigation and feasibility study.

(a) If the initial cleanup actions taken at an UST site do not achieve cleanup levels throughout the site, a remedial investigation and feasibility study may need to be conducted in accordance with WAC [173-340-350](#). The scope of a remedial investigation and feasibility study will depend on the informational needs at the site. UST owners and operators shall conduct a remedial investigation and feasibility study for sites where the following conditions exist:

(i) There is evidence that the release has caused hazardous substances to be present in the groundwater in excess of the groundwater standards adopted under chapter [90.48](#) RCW or cleanup levels in WAC [173-340-720](#) (Table 720-1);

(ii) Free product is found; or

(iii) Where otherwise required by the department.

(b) UST owners and UST operators shall submit the information collected for the remedial investigation/feasibility study to the department as soon as practicable. The information may be included with other reports submitted under this section.

(c) If the department determines, based on the results of the remedial investigation/feasibility study or other information, that additional remedial action is required, the department may require the UST owner or the UST operator to submit engineering documents as described in WAC [173-340-400](#).

(7) Cleanup actions. Unless directed to do otherwise by the department, cleanup actions performed by UST owners or UST operators shall comply with the cleanup standards described in WAC [173-340-700](#) through [173-340-760](#) and the requirements for the selection of cleanup actions in WAC [173-340-350](#) through [173-340-390](#).

(8) Independent cleanup actions. In addition to work performed under subsections (2) through (5), and (7) of this section, UST owners or UST operators performing independent cleanup actions shall:

(a) Notify the department of their intention to begin cleanup. This can be included with other reports under this section;

(b) Comply with any conditions imposed by the department to assure adequate protection of human health and the environment; and

- (c)** Within ninety days of completion of the cleanup action, submit the results of all investigations, interim and cleanup actions and compliance monitoring not previously submitted to the department.

References

Reference	Web Page
State Cleanup Program	
Program Web Page	https://ecology.wa.gov/Spills-Cleanup/Contamination-cleanup
Cleanup Process Web Page	https://ecology.wa.gov/Spills-Cleanup/Contamination-cleanup/Cleanup-process
Chapter 70.105D RCW	https://apps.leg.wa.gov/RCW/default.aspx?cite=70.105D
Chapter 173-340 WAC	https://apps.leg.wa.gov/WAC/default.aspx?cite=173-340
WAC 173-340-330	https://apps.leg.wa.gov/WAC/default.aspx?cite=173-340-330
WAC 173-340-450	https://apps.leg.wa.gov/WAC/default.aspx?cite=173-340-450
WAC 173-340-510	https://apps.leg.wa.gov/WAC/default.aspx?cite=173-340-510
WAC 173-340-515	https://apps.leg.wa.gov/WAC/default.aspx?cite=173-340-515
WAC 173-340-820	https://apps.leg.wa.gov/WAC/default.aspx?cite=173-340-820
WAC 173-340-830	https://apps.leg.wa.gov/WAC/default.aspx?cite=173-340-830
WAC 173-340-840	https://apps.leg.wa.gov/WAC/default.aspx?cite=173-340-840
State UST Program	
Program Web Page	https://ecology.wa.gov/Spills-Cleanup/Contamination-cleanup/Underground-storage-tanks
Chapter 90.76 RCW	https://apps.leg.wa.gov/RCW/default.aspx?cite=90.76
Chapter 173-360A WAC	https://apps.leg.wa.gov/WAC/default.aspx?cite=173-360A
WAC 173-360A-0665	https://apps.leg.wa.gov/WAC/default.aspx?cite=173-360A-0665
WAC 173-360A-0750	https://apps.leg.wa.gov/WAC/default.aspx?cite=173-360A-0750
WAC 173-360A-1045	https://apps.leg.wa.gov/WAC/default.aspx?cite=173-360A-1045

Reference	Web Page
Federal UST Program	
Program Web Page	https://www.epa.gov/ust
Federal UST Regulations (40 C.F.R. Part 280)	https://www.ecfr.gov/cgi-bin/text-idx?SID=fe33aa91b1938a76c0c6cd9ed8e8e2b2&mc=true&node=pt40.29.280&rqn=div5
Federal Regulations for State Program Approval (40 C.F.R. Part 281)	https://www.ecfr.gov/cgi-bin/text-idx?SID=fe33aa91b1938a76c0c6cd9ed8e8e2b2&mc=true&node=pt40.29.281&rqn=div5
40 C.F.R. Sec. 281.35	https://www.ecfr.gov/cgi-bin/text-idx?SID=fe33aa91b1938a76c0c6cd9ed8e8e2b2&mc=true&node=pt40.29.281&rqn=div5#se40.29.281_135
Pollution Liability Insurance Program	
Agency Home Page	https://plia.wa.gov/
Commercial UST Reinsurance Program	https://plia.wa.gov/commercial-ust-reinsurance-program/
UST Loan and Grant Program	https://plia.wa.gov/ust-loan-and-grant-program/
Petroleum Technical Assistance Program	https://plia.wa.gov/ptap/
Chapter 374-80 WAC*	https://apps.leg.wa.gov/wac/default.aspx?cite=374-80

* PLIA adopted changes to Chapter 374-80 WAC on December 27, 2019, to implement its Petroleum Technical Assistance Program (PTAP). The changes are effective on January 25, 2020. As of the date this document was distributed, the changes were not viewable online. For more information about PLIA's rulemaking, visit: <https://plia.wa.gov/about-plia/administrative-rulemaking/>.