



DEPARTMENT OF
ECOLOGY
State of Washington

Final Regulatory Analyses

Including the:

- Final Cost-Benefit Analysis
- Least-Burdensome Alternative Analysis
- Administrative Procedure Act Determinations
- Regulatory Fairness Act Compliance

*Chapter 173-360 WAC and
Chapter 173-360A WAC
Underground Storage Tank Regulations*

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Chapter 173-360 WAC and

Chapter 173-360A WAC

Underground Storage Tank Regulations

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Executive Summary

This report presents the determinations made by the Washington State Department of Ecology (Ecology) as required under chapters 34.05 RCW and 19.85 RCW, for the adopted amendments to the Underground Storage Tank (UST) regulations rule (chapter 173-360 WAC; the “rule”). This includes the:

- Final Cost-Benefit Analysis (CBA)
- Least-Burdensome Alternative Analysis (LBA)
- Administrative Procedure Act Determinations
- Regulatory Fairness Act Compliance

The UST rule governs the installation, operation, maintenance, and closure of UST systems containing petroleum or other regulated substances. It also governs the detection of, responses to, and financial responsibility for releases from those systems.

The Department of Ecology (Ecology) is repealing Chapter 173-360 WAC and adopting new Chapter 173-360A WAC, Underground Storage Tank (UST) Regulations. The new chapter replaces the repealed chapter. Ecology is changing the regulations to:

1. Maintain federal approval of the state’s UST program, as required by the authorizing state statute, Chapter 90.76 RCW.
2. Implement changes to the state’s UST program specified in the authorizing state statute, Chapter 90.76 RCW.
3. Reduce the number and severity of releases of petroleum and other hazardous substances from UST systems, which pose a serious threat to human health and the environment, including drinking water.
4. Make the rule easier to use and understand by the regulated community.

The rule amendments make the following changes to sections not required by other laws or rules:

- Adopting a new chapter, Chapter 173-360A WAC and repealing Chapter 173-360
- Part 1 – Scope and definitions
- Part 2 – Administration and enforcement
- Part 3 – Installation and performance standards
- Part 4 – Operation and maintenance
- Part 5 – Operator training
- Part 6 – Release detection
- Part 7 – Release reporting, confirmation, and cleanup
- Part 8 – Closure
- Part 9 – Service providers

- Part 10 – Financial responsibility

The potential costs for the rule amendments include:

- Notification.
- Reporting.
- Record retention.
- Demonstration of compatibility.
- Corrosion assessment.
- Additional testing.
- Walkthrough inspections.
- Updating training programs.
- Evaluation of structural integrity.

While some of the costs only occur under some specific circumstances, others apply overall. Quantifiable estimated costs totaled a 20-year present value of \$1.4 million.

The potential benefits of the rule amendments include:

- Decreased costs for owners for reporting, record retention, and notification.
- Elimination of cathodic protection in some circumstances.
- Elimination of the need for financial responsibility in some circumstances.
- Environmental, health, and property benefits due to lessening chance for a release.

While some of the benefits only occur under specific circumstances, others apply universally. We could not confidently estimate total aggregate benefits of the rule amendments for reduced likelihood of a release, due to uncertainty in the degree to which likelihood will be reduced. We estimate, however, that each one percent aggregate decrease in the chance of a release results in a benefit of \$900 thousand to \$90 million. We also estimated a \$1,200 benefit of eliminated duplicative reporting requirements.

Ecology concludes, based on reasonable understanding of the quantified and qualitative costs and benefits likely to arise from the rule amendments, that the benefits of the rule amendments are greater than the costs.

After considering alternatives to the rule's contents, as well as the goals and objectives of the authorizing statute, Ecology determined that the rule amendments represent the least-burdensome alternative of possible rule contents meeting these goals and objectives.

Ecology concludes that the rule amendments are likely to have disproportionate impacts on small businesses, and therefore Ecology must include elements in the rule amendments to mitigate this disproportion, as far as is legal and feasible.

Chapter 1: Background and Introduction

1.1 Introduction

This report presents the determinations made by the Washington State Department of Ecology (Ecology) as required under chapters 34.05 RCW and 19.85 RCW, for the adopted amendments to the Underground Storage Tank (UST) regulations rule (chapter 173-360 WAC; the “rule”). This includes the:

- Final Cost-Benefit Analysis (CBA)
- Least-Burdensome Alternative Analysis (LBA)
- Administrative Procedure Act Determinations
- Regulatory Fairness Act Compliance

The Washington Administrative Procedure Act (APA; RCW 34.05.328(1)(d)) requires Ecology to evaluate significant legislative rules to “determine that the probable benefits of the rule are greater than its probable costs, taking into account both the qualitative and quantitative benefits and costs and the specific directives of the law being implemented.” Chapters 1 – 5 of this document describe that determination.

The APA also requires Ecology to “determine, after considering alternative versions of the rule...that the rule being adopted is the least burdensome alternative for those required to comply with it that will achieve the general goals and specific objectives” of the governing and authorizing statutes (RCW 34.05.328(1)(d)). Chapter 6 of this document describes that determination.

The APA also requires Ecology to make several other determinations (RCW 34.05.328(1)(a) – (c) and (f) – (h)) about the rule, including authorization, need, context, and coordination. Appendix A provides the documentation for these determinations.

The Washington Regulatory Fairness Act (RFA; Chapter 19.85 RCW) requires Ecology to evaluate the relative impact of proposed rules that impose costs on businesses in an industry. It compares the relative compliance costs to small businesses to the largest businesses affected. Chapter 7 documents that analysis, when applicable.

1.1.1 Rulemaking motivation

The UST rule governs the installation, operation, maintenance, and closure of UST systems containing petroleum or other regulated substances. It also governs the detection of, responses to, and financial responsibility for releases from those systems.

In October 2015, the Environmental Protection Agency (EPA) adopted changes to the federal UST rule (40 C.F.R. Part 280). This is the first major revision to the federal rule since 1988. The federal changes add new operation and maintenance requirements for UST systems and establish requirements for certain types of UST systems deferred in the

original federal rules. The changes also include the requirements in the UST Compliance Act of 2005, which the state had already implemented.¹

EPA also adopted changes to the state program approval requirements (40 C.F.R. Part 281) to reflect the changes in the federal UST rule. States with approved programs, including Washington State, must incorporate the new federal requirements within three years (by October 2018) to maintain approval.

Ecology is repealing Chapter 173-360 WAC and adopting the new Chapter 173-360A WAC, Underground Storage Tank Regulations. The new chapter replaces the repealed chapter. Ecology is changing the regulations to:

1. Maintain federal approval of the state's UST program, as required by the authorizing state statute, Chapter 90.76 RCW.
2. Implement changes to the state's UST program specified in the authorizing state statute, Chapter 90.76 RCW.
3. Reduce the number and severity of releases of petroleum and other hazardous substances from UST systems, which pose a serious threat to human health and the environment, including drinking water.
4. Make the rule easier to use and understand by the regulated community.

1.2 Summary of the rule amendments

The rule amendments make changes to following parts of the chapter not required by other laws or rules:

- Adopting a new chapter, Chapter 173-360A WAC and repealing Chapter 173-360 including:
 - Part 1 – Scope and definitions
 - Part 2 – Administration and enforcement
 - Part 3 – Installation and performance standards
 - Part 4 – Operation and maintenance
 - Part 5 – Operator training
 - Part 6 – Release detection
 - Part 7 – Release reporting, confirmation, and cleanup
 - Part 8 – Closure
 - Part 9 – Service providers
 - Part 10 – Financial responsibility

¹ In 2007, the Legislature amended Chapter 90.76 RCW to implement the new federal requirements in the UST Compliance Act of 2005. The Legislature directed Ecology to adopt rules that are consistent with and no less stringent than those requirements. See [Laws of 2007, Chapter 147](#). In 2012, Ecology adopted changes to Chapter 173-360 WAC to implement the federal requirements in the UST Compliance Act of 2005. See [WSR 12-17-041](#).

1.3 Reasons for the rule amendments

Simplification of Consistency Changes

The rule amendments include changes made for simplification or consistency throughout the rule. These include:

Recordkeeping changes

With regard to recordkeeping Ecology made changes to simplify recordkeeping requirements and make them more consistent. The previous rule had many different timeframes for keeping records; such as, one year, two tests, five years, life of the system, last three tests, etc. In the adopted changes, record retention is one of three time periods:

- Three years for annual tests to correspond with the three year inspection cycle so that Ecology can see all tests between inspections.
- Six years for tests required every three years so that two records are available for review during an inspection.
- Life of the system for anything that would be relevant for that period of time, records of installations, repairs, compatibility, etc. This information is relevant throughout the system's life for repairs and to investigate releases etc.

Regarding previously deferred systems, changes were made in the rule amendments to align recordkeeping requirements for these systems with the general requirements for USTs that were regulated under Chapter 173-360 WAC.

Implementation timelines:

The rule amendments include several new timelines for implementation. The following reasons support how we developed the timelines:

- The timeline had to be at least as stringent as the federal timeline.
- If there were no outside costs to the owner (such as paying a service provider) one year was given to start new provision even if the federal rule allowed a longer period of time.
- If the provision resulted in new outside costs to the owner the provision was pushed out to align with the federal timeline, with the exception of the testing of spill buckets, overfill prevention devices and containment sumps. The reasoning for not following the federal timeline for this testing can be found in section 1.3.5.

1.3.1 Part 1 – Scope and definitions

The rule amendments change the heating oil exemption by eliminating the release reporting requirement for UST systems storing heating oil over 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 Model Toxics Control Act (MTCA) cleanup regulations (WAC 173-340-300(2)) and this will eliminate duplicative requirements.

We are also changing the requirement for maintaining installation records for partially excluded tanks to bring them in line with requirements for tanks that are currently regulated. The end result will be the same requirement for all tanks regulated by this rule.

1.3.2 Part 2 – Administration and enforcement

The rule amendments eliminate tank fees that were never collected between the time the tank was closed and the cleanup yet to be completed.

The adopted rule:

- Does not carry forward the requirement to notify the buyer of licensing requirements because it was impossible to confirm if it ever happened.
- Eliminates the need to keep records on site in an effort to allow the use of technology to maintain records.
- Will improve the rate at which records are transferred at the point of sale, making it more likely that new owners have installation and repair records that would be useful if additional repairs are needed or release is suspected.

1.3.3 Part 3 – Installation and performance standards

Installation of UST systems and components

The rule amendments to installation requirements were made to improve communication between the installer and Ecology. This is to ensure that Ecology can be present during installation to see the tank before it is backfilled and to prohibit poor practices that have been, or may be, used to install tank components in the state.

Required installation records are to be maintained for the life of the system to preserve a key source of information about the tank system.

Performance standards for new UST systems and components

The rule amendments eliminate the option of using secondary barriers to meet the secondary containment requirement for hazardous substances for tanks installed on or before October 1, 2012. We are eliminating this requirement because that method is not as protective of the environment as a double walled tank. Furthermore, this method is not currently used in Washington.

The rule amendments provide detail to the Under Dispenser Containment (UDC) requirement because UDCs have been installed in Washington using a spray-on material with plywood as backing. This method meets the letter of the law but does not provide lasting containment under the dispenser as plywood rots and the spray-on material fails without a backing. Washington also has reservations about the spray on material's compatibility with other UST components such as piping.

The rule amendments allow assessments of corrosion to avoid installing cathodic protection, they must be performed every five years after installation to verify continuing non-corrosive nature of the location.

Updates to recordkeeping requirements for existing and previously deferred UST systems.

The rule amendments also bring the retention of installation records for all tanks in line with existing requirement for repairs. (See discussion in 1.3 on recordkeeping.)

Performance standards for partially exempt UST systems

The rule amendments specify that if corrosion assessments are implemented on partially exempt UST systems, they must be performed every five years after installation to verify continuing non-corrosive nature of the location.

Compatibility requirements for UST systems

The rule amendments require hazardous substance tanks to demonstrate compatibility in line with other regulated tanks.

For previously deferred systems recordkeeping requirements were aligned with the requirement for regulated USTs. (See discussion in 1.3 on recordkeeping.)

1.3.4 Part 4 – Operation and maintenance

Transfer of regulated substances

Rule amendments were made to align the requirements of delivery drivers with requirements of owners, to ensure that owners are made aware of a spill during deliveries and to ensure that drivers comply with spill and overfill requirements during fueling, the most common event to result in a spill of regulated substance.

Delivery drivers and waste oil collectors must report a spill to the owner immediately to ensure that the owner is aware of any violation of the spill and overfill requirements.

Operation and Maintenance walkthrough inspections

Rule amendments were made to align recordkeeping for this section with the record retention plan and implementation schedule outlined above. (See 1.3 for further discussion)

The implementation timelines for walkthrough inspections for sumps, spill buckets and overfill prevention devices were split into two implementation schedules as a solution to the predictable problem of owners deferring costs until the last minute to conduct new testing. Washington has over 9,000 tanks and less than 100 individuals certified to conduct the testing required by these changes. In addition, many of the certified individuals also do work in Idaho and Oregon which will also be implementing new testing requirements at the same time as Washington. The two and three year timelines are for all new testing so that owners can align testing timelines and have all the testing completed at the same time, a cost savings.

Operation and maintenance of corrosion protection

For cathodic protection test record, see records retention at the beginning of this section.

For recordkeeping for rectifier inspections, see records retention 1.3.

The implementation timeline follows same logic as described in Operation and Maintenance walkthrough inspections.

Operation and maintenance of containment sumps used for interstitial monitoring and spill prevention equipment

In line with requirements of the previous rule, the rule amendments require service providers to conduct the testing and to ensure trained tank professionals are conducting the tests using consistent methods.

Previously all testing in Washington had to be reported to Ecology. This was applied to the new testing in the adopted rule to maintain consistency.

For records maintenance see records retention, 1.3.

The implementation timeline follows same logic as described in Operation and Maintenance walkthrough inspections.

Operation and maintenance of overfill prevention equipment

In line with requirements of the previous rule, the rule amendments require service providers to conduct the testing and to ensure trained tank professionals are conducting the tests using consistent methods.

Previously all testing in Washington had to be reported to Ecology. This was applied to the new testing in the rule amendments to maintain consistency.

For records maintenance, see records retention, 1.3.

The implementation timeline follows same logic as described in Operation and Maintenance walkthrough inspections.

Operation and maintenance of release detection equipment

In line with requirements of the previous rule, the rule amendments require service providers to conduct the testing and to ensure trained tank professionals are conducting the tests using consistent methods.

Previously all testing in Washington had to be reported to Ecology. This was applied to the new testing in the rule amendments to maintain consistency.

For records maintenance, see records retention, 1.3.

The implementation timeline follows same logic as described in Operation and Maintenance walkthrough inspections.

Repairs of UST systems

In line with requirements of the previous rule, the rule amendments require service providers to conduct the testing and to ensure trained tank professionals are conducting the tests using consistent methods.

Previously all testing in Washington had to be reported to Ecology. This was applied to the new testing in the rule amendments to maintain consistency.

For records maintenance, see records retention, 1.3.

The requirement that testing must after any repair was added to confirm that the repair was effective and lasting.

1.3.5 Part 5 – Operator training

The rule amendments:

- Update the grandfather clause so that owners who currently hold an owner operator training certificate do not need to retake the training.
- Update Class A and/or B Training requirements to align with the federal rule. They also set a timeline for trainers to update their training curriculum to ensure that outdated trainings are not being sold to owners beyond the specified timeline.
- Eliminate the exemption from retraining for operators who are retrained annually due to ongoing problems with these operators.
- Update the operation and maintenance plan requirements to include new rule provisions.

1.3.6 Part 6 – Release detection

General requirements – recordkeeping

The rule amendments change the record retention schedules to ensure records are retained for at least one inspection cycle, three years, and requires at least two tests are available for inspection. See section 1.3.1.

Weekly manual tank gauging

The rule amendments apply the requirement to be able to measure water level to all release detection methods, including weekly manual tank gauging. Water in an UST can lead to the sale of bad fuel and result in accelerated corrosion of the tank. This also brings this method in line with other methods.

1.3.7 Part 7 – Release reporting, confirmation, and cleanup

Site assessment requirements

Minimum site assessment requirements are incorporated into the rule amendments to move away from referring to a guidance document in the rule. Site assessment minimum sampling requirements are also being updated to align with current industry best practices.

The size of the tank needing five samples has been lowered from 20,000 gallons to 9,000 gallons to increase the likelihood that a release is detected by sampling.

1.3.8 Part 8 – Closure

Temporary closure of UST systems

The rule amendments no longer allows temporary closed tanks to have product in them for an extended period of time (more than 90 days), which reduces the chances of releases to the environment.

Ecology is also eliminating the percent of total weight criteria as an option for determining if a tank was empty because this method was difficult to calculate accurately and was never used.

The rule amendments eliminate the requirement that tanks are permanently closed after 12 months, because this provision was only applicable for ten years after the 1998 rule update. The tanks this would have impacted are well past that ten year window.

Preliminary evaluation of structural integrity was added to ensure that there is confidence in the structure of the tank prior to reintroducing fuel to an UST.

Leak testing was incorporated into the process of bringing a tank into active status after an extended period of temporary closure to provide a baseline for putting product back in the tank and to provide clarity as to what needs to be done.

Permanent closure and change-in-service of UST systems

The rule amendments:

- Eliminate redundancies.
- Require notification three days prior to starting work to improve communication between Ecology and regulated community during permanent closure.
- Eliminate the requirement that a closure or change-in-service must be completed within 90 days because we did not see the utility in this provision.
- Eliminate the requirement to retain closure records because those records must be submitted to Ecology.
- Eliminated exception to site assessment, bringing the requirements for these tanks in line with all other tanks regulated by this rule.
- Require that Ecology be notified of permanent closure of partially closed tanks so that Ecology is aware that these tanks are being closed.

1.3.9 Part 9 – Service providers

Certifications required to perform services

The rule amendments apply the previous requirement of being certified to work on USTs and apply it to new testing requirements to ensure that trained professionals are testing tanks and to provide consistency in the methods used to conduct testing.

Responsibilities of service providers

The rule amendments require decommissioners and site assessors to be present during decommissioning activities to ensure samples are taken from areas adjacent to the component being decommissioned. These samples are used to determine whether a release occurred.

Ecology aligned release reporting to be within 24 hours so that the requirement will be the same time period for owners and service providers to eliminate confusion.

1.3.10 Part 10 – Financial responsibility

Period of financial responsibility

The rule amendments change the requirements for insurance during temporary closure to bring the state in compliance with federal regulations. Currently insurance companies are terminating policies on empty, temporary closed tanks making the owner out of compliance with the federal insurance requirement.

The rule amendments eliminate the requirement to have insurance until any releases are cleaned up because there is no longer a tank to insure.

State fund financial assurance option

Washington does not have a state fund so this option was eliminated.

Recordkeeping by owners or operators

In line with other recordkeeping requirements, the location of financial responsibility records is no longer specified allowing the owner to use any technology available to maintain records.

Reporting by owners and operators

Demonstration of Financial Responsibility was updated to bring the rule in line with current practice.

Certificates of insurance and endorsement boilerplates

The requirement to list the retroactive date on insurance policies aligns the rule with current recordkeeping practices and will provide Ecology additional data to understand how owners and operators are using insurance in Washington.

Contact information was added to help inform both the insurer and insured about who holds the endorsement.

1.3.11 Creating a new chapter, Chapter 173-360A WAC, and repealing Chapter 173-360 WAC

Ecology is adopting a new chapter, Chapter 173-360A WAC and repealing Chapter 173-360 WAC. The new chapter replaces the existing chapter. Ecology is adopting the new chapter because we reorganized the requirements and simplified language in some areas. This was based on feedback from staff and regulated entities and to make the chapter easier to use.

The discussion that follows in this document describes changes from Chapter 173-360 WAC. Those sections not discussed below were moved to the new chapter without changes in the effect of the rule. We made some language revisions to this moved language without material effect on requirements in order to fit them into the new organization.

1.4 Document organization

The remainder of this document is organized in the following chapters:

- Baseline and the adopted rule amendments (Chapter 2): Description and comparison of the baseline (what would occur in the absence of the rule amendments) and the changes to rule requirements.
- Likely costs of the rule amendments (Chapter 3): Analysis of the types and sizes of costs we expect impacted entities to incur as a result of the rule amendments.
- Likely benefits of the rule amendments (Chapter 4): Analysis of the types and size of benefits we expect to result from the rule amendments.
- Cost-benefit comparison and conclusions (Chapter 5): Discussion of the complete implications of the CBA.
- Least-Burdensome Alternative Analysis (Chapter 6): Analysis of considered alternatives to the contents of the rule amendments.
- Small Business Economic Impact Statement (Chapter 7): Comparison of compliance costs to small and large businesses; mitigation; impact on jobs.
- RCW 34.05.328 determinations not discussed in Chapter 5 or 6 (Appendix A).

Chapter 2: Baseline and the Rule Amendments

2.1 Introduction

We analyzed the impacts of the rule amendments relative to the baseline of the previous rule, within the context of all existing requirements (federal and state laws and rules). This context for comparison is called the baseline, and reflects the most likely regulatory circumstances that entities would face if the rule amendments were not adopted. It is discussed in Section 2.2, below.

2.2 Baseline

The baseline for our analyses generally consists of existing rules and laws, and their requirements. This is what allows us to make a consistent comparison between the state of the world with and without the rule amendments. Without the rule amendments, the previous rule would remain in place and the federal rule would be applied to the state by the Environmental Protection Agency (EPA). We are therefore analyzing the impacts of the rule amendments as the difference between the rule amendments and the existing state and federal rules.

For this rulemaking, the baseline includes:

- The previous rule, chapter 173-360 WAC Underground Storage Tank Regulations.
- The authorizing statute, chapter 90.76 RCW, Underground Storage Tanks.
- Related laws and rules, including but not limited to:
 - 40 C.F.R. Part 280
 - 40 C.F.R. Part 281

2.3 Rule amendments

Rule amendments that differ from the baseline and are not *specifically* dictated in the authorizing statute or elsewhere in law or rule are found in the following parts of the new chapter:

- Part 1 – Scope and definitions:
- Part 2 – Administration and enforcement
- Part 3 – Installation and performance standards
- Part 4 – Operation and maintenance
- Part 5 – Operator training
- Part 6 – Release detection
- Part 7 – Release reporting, confirmation, and cleanup
- Part 8 – Closure
- Part 9 – Service providers

- Part 10 – Financial responsibility
- Creating a new chapter, Chapter 360A WAC

2.3.1 Part 1 – Scope and definitions

Baseline

In the previous rule, exemptions and exclusions are allowed for various types of UST systems to not be required to be licensed. Requirements for maintaining these exceptions are set.

Adopted

Exempt UST systems: Changes the heating oil exemption by removing the requirement for tanks over 1,100 gallons to report releases.

Partially exempt UST systems: Adds requirement that installation records must be maintained until the partially excluded UST system is permanently closed or undergoes a change-in-service.

Expected impact

Systems storing more than 1,100 gallons of heating oil were previously subject to the release reporting requirements in the rule. However, this duplicates requirements under chapter 173-340 WAC Model Toxics Control Act (MTCA). The likely impact is a benefit to owners of such systems in the form of eliminating duplicative reporting.

For partially exempt systems, the impact is the cost of maintaining installation records.

2.3.2 Part 2 – Administration and enforcement

Baseline

The previous rule detailed administrative requirements for system owners.

Adopted

- Eliminates requirement that owners must pay tank fees after an UST system has undergone permanent closure or a change-in-service until any releases have been cleaned up.
- Changes reporting requirements for sellers:
 - Eliminates 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.
 - Adds requirement that persons who lease tanks must notify lessee.
- Recordkeeping:
 - Eliminates specific requirement about where records must be maintained. Clarified that records only need to be made available for inspection upon request.
 - Eliminates requirement that decommissioning records must be maintained since such records must already be submitted to Ecology upon permanent closure or change-in-service.
 - Adds requirement that records must be transferred upon changes in ownership or operation.

Expected impact

We expect these changes to benefit system owners in the form of decreased requirements, elimination of fees, and improve the rate at which records are transferred at the point of sale. They will also impose costs in the form of notification and record transfer and help align recordkeeping requirements with current practices.

2.3.3 Part 3 – Installation and performance standards

Baseline

The previous rule listed the installation requirements and performance standards for UST systems.

Adopted

Installation of UST systems and components:

- Adds requirement that owners and operators must confirm planned start date at least three business days before starting installation.
- Adds 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.

Performance standards for new UST systems and components:

- Unlike under the federal rule, specifies that corrosion assessments if used to avoid installing cathodic protection, must be performed every five years after installation and that reports documenting the determination and its basis must be submitted to the department.
- For secondary containment, eliminates secondary barriers as an option for hazardous substance UST systems installed on or before October 1, 2012, since all such systems are double-walled and secondary barriers have yet to be used in Washington.
- For under-dispenser containment (UDC), adds requirement that they must be factory-built or machine-tooled, unless otherwise approved by the department. The requirement only applies to UDC installed or replaced after the effective date of rule.

Upgrade to recordkeeping requirements for existing and previously deferred UST systems:

- Adds 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.

Performance standards for partially exempt UST systems:

- Unlike under the federal rule, corrosion assessments used to avoid installing cathodic protection must be performed every five years after installation. Reports documenting the determination and its basis must be submitted to the department.

Compatibility requirements for UST systems:

- Specifies that compatibility demonstrations are also required for UST systems storing hazardous substances. The federal rule does not require this.
- Specifies that records of compatibility demonstrations must be maintained until the system is permanently closed or undergoes a change-in-service.

Expected impact

The rule amendments in Part 3 will potentially result in increased costs for system owners. These costs arise from record retention, demonstration of compatibility, corrosion assessment and reporting.

Benefits will also accrue due to improved communication and aligning requirements. Also, ensuring that Ecology is present by confirming installation start dates will discourage poor practices that may have been used in installation previously.

2.3.4 Part 4 – Operation and maintenance

Baseline

The previous rule addressed the operation and maintenance of UST systems.

Adopted

Transfer of regulated substances:

- Adds requirement that product deliverers must comply with spill and overfill control requirements.
- Adds requirement that product deliverers and waste oil collectors must report any spill or overfill of regulated substances immediately to the owner or operator.

Operation and maintenance walkthrough inspections:

- Specifies that records of walkthrough inspections must be maintained for three years. The federal rule specifies one year.
- Specifies that walkthrough inspections must begin upon installation or one year after effective date (for systems installed prior to the amended rule). The federal rule specifies three years after effective date for all systems.

Operation and maintenance of corrosion protection:

- Changes record retention for cathodic protection tests from last two tests, which is the same as the federal rule, to six years (two compliance inspections). Tests are performed every 3 years.
- Changes record retention for rectifier inspections from last three inspections, which is the same as the federal rule, to three years (one compliance inspection).

Operation and maintenance of containment sumps used for interstitial monitoring and spill prevention equipment:

- Specifies that tightness tests must be performed by a certified service provider. The federal rule does not specify who may perform these tests.

- Specifies that tightness tests must be reported. The federal rule does not require reporting.
- Specifies that records of tightness tests must be retained for six years (two inspection cycles). The federal rule requires such records to be maintained for three years.
- Specifies that records of periodic monitoring 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.
- Specifies 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. The rule amendments are 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.

Operation and maintenance of overfill prevention equipment:

- Specifies that inspections must be performed by a certified service provider. The federal rule does not specify who may perform the inspections.
- Specifies that inspections must be reported. The federal rule does not require reporting.
- Specifies that flow restrictors in vent lines needing repairs must be replaced with another type of overfill prevention equipment.
- Specifies that records of inspections must be retained for six years (two inspection cycles). The federal rule requires such records to be maintained for three years.
- Specifies 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. The rule amendments are 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.

Operation and maintenance of release detection equipment:

- Specifies that tests must be performed by a certified service provider. The federal rule does not specify who may perform the tests.
- Specifies that tests must be reported. The federal rule does not require reporting.
- Specifies that schedules of required calibration and maintenance must be maintained for as long as the equipment is used. The federal rule requires such records to be maintained for five years.
- Specifies that testing of release detection equipment must begin upon installation (for systems installed after effective date) or either two or three years after effective date (for systems installed on or before effective date) based on whether the facility compliance

tag number is even or odd. The federal rule requires compliance within three years for all UST systems.

Repairs of UST system components:

- Specifies that tests must be performed by a certified service provider. The federal rule does not specify who may perform such tests.
- Specifies that tests must be reported. The federal rule does not require reporting.
- Specifies that records of tests must be retained for three years (one inspection cycle). The federal rule does not specify record retention for such tests.
- Adds 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.

Expected impact

The rule amendments could result in costs for product deliverers and waste oil collectors, however, we expect that they are already complying with spill and overflow control requirements.

Expected additional costs for owners are associated with walkthrough inspections, and record retention duration.

Also, costs may accrue for use of certified service providers for tightness tests, overflow prevention equipment inspections, release detection equipment inspections, and repairs to system components; as well as reporting of these inspections and retention of these records.

Potential benefits could result from greater ability for Ecology to identify trends in reporting data and decreasing the probability of a release.

2.3.5 Part 5 – Operator training

Baseline

The previous rule included requirements for operator training.

Adopted

Operator training:

- Updates grandfather clause to clarify that retraining is not required merely because the training requirements are changed.
- Adds requirements that existing Class A and/or B training programs and examinations must be revised to reflect changes in training requirements and approved by the department. Updates must be submitted within six months of the effective date of the rule.
- Eliminates exemption from retraining requirements for Class A and Class B operators retrained annually.

The rule amendments add operation and maintenance of containment sumps to the list of what must be included in operation and maintenance plans, consistent with new requirements.

Expected impact

The rule amendments will result in likely costs in the form of updating training programs and benefits due to avoided retraining through the grandfather clause.

2.3.6 Part 6 – Release detection

Baseline

The previous rule included requirements pertaining to release detection.

Adopted

General requirements – recordkeeping:

- Changes retention period for 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.
- Changes retention period for tank and line tightness test results from the last test to the last two tests, including when performed on previously deferred UST systems. The federal rule requires the last test result.
- Specifies that retention period is the last two test results for vapor monitoring using a tracer compound every two years. The federal rule requires the last test result.
- Changes 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.

Manual tank gauging:

- Adds requirements that equipment must be able to measure water levels, and that water levels must be measured at least once each month.

Expected impact

The rule amendments will likely result in increased costs to the system owners in the form of increased record retention and updating tank gauging equipment to measure water levels.

Potential benefits could result from better identification of potential problems.

2.3.7 Part 7 – Release reporting, confirmation, and cleanup

Baseline

The previous rule discussed requirements pertaining to release reporting, confirmation, and cleanup.

Adopted

Site assessment requirements:

- Incorporates into the rule minimum requirements for site assessments from the guidance document referenced in the current rule. Except as follows, the requirements are the same:

- For assessing single tanks in place, increases the number of samples from three to five for tanks between 9,000 and 20,000 gallons. For assessing multiple tanks in place, clarifies the number of additional samples required for each additional tank.
- For assessing connected dispensers (either removed or in place), clarifies that one sample must be collected for each connected dispenser rather than each dispenser island.
- For assessing single tanks removed from the ground, increases the number of samples from three to five for tanks between 9,000 and 20,000 gallons. For assessing multiple tanks removed from the ground, increases the number of additional samples for each additional tank from one to two.
- For assessing excavated soils, reduces the number of required samples when there is less than 51 cubic yards from three to two (for 26-50) and one (for 0-25).
- For assessing UST system components in place, specifies that samples must be collected as close as practicable to, but no more than ten feet from the applicable component. The current rule does not specify an outside limit.
- Changes 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.

Expected impact

The rule amendments create potential costs to system operators, of conducting additional sampling when conducting a site assessment under some circumstances.

The shortened timeframe for service providers to report confirmed releases being consistent with the requirements for owners and operators is not likely to impact reporting times baseline as owner and operator requirements are more stringent.

The rule amendments create potential benefits in having minimum sampling requirements for site assessments.

2.3.8 Part 8 – Closure

Baseline

The previous rule regulated closure of UST systems.

Adopted

Temporary closure of UST systems:

- Adds 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.
- Eliminates “0.3 percent by weight of the total capacity” as a criterion for determining whether an UST system is empty.
- Eliminates requirement that an UST system must be permanently closed after 12 months if the tanks and piping do not meet applicable performance standards or upgrade requirements. The provision is no longer necessary.

- Adds 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.
- For UST systems temporarily closed more than ninety days, adds requirement that any operation and maintenance tests or inspections suspended during temporary closure must be performed before returning an UST system to operation.

Permanent closure and change-in-service of UST systems:

- Adds requirement that Ecology must be notified of any change in the planned start date for permanent closure or change-in-service at least three business days before starting.
- Eliminates requirement that permanent closure or change-in-service must be completed within 90 days of Ecology's receipt of the notice of intent.
- Eliminates requirement that decommissioning records must be maintained since such records must be submitted to Ecology.
- Eliminates 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.
- Clarifies that a site assessment is not required when a release from the UST system had previously been confirmed and further remedial action is necessary to clean up the confirmed release
- Specifies that Ecology must be notified of the permanent closure of partially excluded UST systems. Such systems no longer need to comply with any other closure requirements.

Expected impact

The rule amendments will likely result in costs to the system owner in the form of either measuring or removing any substances in the system for temporary closure.

Other potential costs include a preliminary evaluation of structural integrity and notification.

Potential benefits accrue from less record retention, the elimination of redundant requirements, longer safe product retention in temporarily closed tanks, and not needing to conduct site assessments when a release was already confirmed at the site.

2.3.9 Part 9 – Service providers

Baseline

The previous rule set requirements for certifications for providers of specific services.

Adopted

Certifications required to perform services:

- Specifies that assessments of corrosion potential, which are now allowed under the rule amendments, must be performed by a corrosion expert or cathodic protection tester.
- Specifies that the following new required services must be performed by a service provider certified in tightness testing or installation/repair:

- Testing of containment sumps used for interstitial monitoring.
- Testing of spill prevention equipment.
- Testing of release detection equipment.
- Inspections of overfill prevention equipment.
- Testing of secondary containment areas of tanks or piping used for interstitial monitoring.

Certification of service providers:

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

Responsibilities of service providers:

- Adds requirement that tanks and piping runs undergoing permanent closure may not be removed from the ground unless both the service provider decommissioning the tanks or piping runs and the site assessor performing the site assessment are present.
- Changes 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.

Expected impact

The rule amendments will likely result in additional costs to system owners as service providers will need certification and will likely charge more because of it.

Potential benefits include providing consistency in the methods used to conduct testing, ensuring proper sampling, and alignment of release reporting to eliminate confusion. The rule amendments create additional benefits in the form of decreasing the chance of a release to occur due to the use of service providers with specific certifications, service providers being present when decommissioning, and aligning of reporting requirements.

2.3.10 Part 10 – Financial responsibility

Baseline

The previous rule set regulations for financial responsibility for UST system owners.

Adopted

Period of financial responsibility:

- Unlike the federal rule, the rule amendments specify 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. A site assessment is not needed if a release had previously been confirmed and further remedial action is needed to clean up the confirmed release.
- Unlike the federal rule, the rule amendments specify that financial responsibility does not need to be maintained after permanent closure or change-in-service until any releases from the UST system are cleaned up.

State fund financial assurance option:

- Eliminates requirements for state fund option since there is no such option in Washington State.

Recordkeeping by owners and operators:

- Eliminates requirement that specifies where financial responsibility records must be maintained. Records must still be made available upon request by the department.

Reporting by owners and operators:

- For insurance, to demonstrate financial responsibility, specifies the need to submit both certification of financial responsibility and certificate of insurance or endorsement.

Certificates of insurance and endorsement boilerplates:

- Adds “policy retroactive date” to information that must be included on certificates of insurance and endorsements to insurance policies.
- Adds contact information for the Business Licensing Service to help inform both the insurer and insured who holds the endorsement.

Expected impact

The rule amendments will likely create benefits for system owners by allowing periods where financial responsibility need not be maintained. Costs may accrue due to submission of certification of financial responsibility and certificate of insurance or endorsement.

2.3.11 Creating a new chapter, Chapter 173-360A WAC

Baseline

Chapter 173-360A WAC did not exist. Most of the information that is included in Chapter 173-360A WAC was contained in Chapter 173-360 WAC.

Adopted

Creation of a new chapter, Chapter 173-360A WAC. Repeal of Chapter 173-360 WAC. Incorporate and update existing requirements into the new chapter.

Expected impact

The adoption of the new chapter will simplify and improve clarity.

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Chapter 3: Likely Costs of the Rule Amendments

3.1 Introduction

We estimated the likely costs associated with the rule amendments, as compared to the baseline. The rule amendments and the baseline are discussed in detail in Chapter 2 of this document.

3.2 Cost analysis

3.2.1 Part 1 – Scope and definitions

Costs will be limited to keeping installation records until the partially excluded UST system is permanently closed or undergoes a change-in-service. These costs will be minimal, as many UST owners likely already keep these records in case something unforeseen happens.

3.2.2 Part 2 – Administration and enforcement

Costs in the form of notification and record transfer will be incurred. We estimated this cost based on 0.1 hours of reporting clerk's time, a \$15.24 hourly wage² multiplied by a factor of 2.257 for overhead,³ and an inflation adjustment of 2.7 percent,⁴ for a total cost of \$3.53, occurring when a change in ownership or operation occurs.

3.2.3 Part 3 – Installation and performance standards

The rule amendments will potentially result in increased costs from record retention, demonstration of compatibility, corrosion assessment and reporting.

Record retention

Installation, upgrade, and compatibility records must be maintained until the UST system is permanently closed or undergoes a change-in-service. These costs will be minimal, as they do not need to create the records, they simply need to retain them once they are acquired.

Demonstration of compatibility

For UST systems storing hazardous substances, compatibility demonstrations are required. These can be:

1. Certification or listing of equipment or components by a nationally recognized, independent testing laboratory for use with the regulated substance stored; or
2. Approval by the equipment or component manufacturer. The manufacturer's approval must be in writing, indicate an affirmative statement of compatibility, and specify the hazardous substances or range of biofuel blends with which the equipment or component is compatible; or

² United States Bureau of Labor Statistics 2016 https://www.bls.gov/oes/current/oes_nat.htm#43-0000 for wage type 43-4000.

³ WA Department of Ecology (2016). Ecology 2017 Standard Cost assumptions. December 2, 2016.

⁴ US Bureau of Labor Statistics (2017). Consumer Price Index 2016-2017.

3. Another option determined by the department to be no less protective of human health and the environment than the options specified.

Tanks are purchased to contain a specific substance and all needed documentation is included with purchase. Therefore there is no cost associated with this requirement because it is included with the purchase of the tank.

Corrosion Assessment

Metal tanks and piping do not need to be cathodically protected if a corrosion expert assesses the environment around the UST system and determines that it is not corrosive enough to cause the system to have a release due to corrosion during its operational life. Initial assessments are required under federal rule. The rule amendments add additional assessments every five years.

While the initial corrosion assessment is estimated by the industry to cost \$8,000, the follow-up assessments are estimated to cost \$789.20 every five years, based on eight hours of an environmental engineer's time, a \$42.56 hourly wage⁵ multiplied by a factor of 2.257 for overhead,⁶ and an inflation adjustment of 2.7 percent.⁷ This is a rarely used provision, currently only five sites, representing ten tanks, have used this provision and moving forward we do not anticipate that number growing.

This results in a total cost of \$3,946 every five years, which converts to a 20-year present value⁸ of approximately \$13,075 over the five sites.

Reporting Corrosion Assessments

Under the rule amendments the owner or operator will now be required to submit corrosion assessments to Ecology. The cost for such reporting involves sending an electronic copy of the assessment.⁹

We estimated this cost based on 0.1 hours of reporting clerk's time, a \$15.24 hourly wage¹⁰ multiplied by a factor of 2.257 for overhead,¹¹ and an inflation adjustment of 2.7 percent.¹²

This results in a cost of \$3.53 per assessment, which converts to a 20-year present value¹³ of approximately \$60 over the five sites.

⁵ United States Bureau of Labor Statistics 2016 https://www.bls.gov/oes/current/oes_nat.htm#17-0000 for wage type 17-2081.

⁶ WA Department of Ecology (2016). Ecology 2017 Standard Cost assumptions. December 2, 2016.

⁷ US Bureau of Labor Statistics (2017). Consumer Price Index 2016-2017.

⁸ United States Treasury Department (2017). Historic rates of returns on I-bonds, 1998 – 2017.

⁹ Under RCW 43.17.095, agencies are required to provide businesses electronic submittal options. Currently, Ecology may require owners or operators to submit paper copies, as the agency moves toward electronic submittal, but has not yet fully implemented this capability.

¹⁰ United States Bureau of Labor Statistics 2016 https://www.bls.gov/oes/current/oes_nat.htm#43-0000 for wage type 43-4000.

¹¹ WA Department of Ecology (2016). Ecology 2017 Standard Cost assumptions. December 2, 2016.

¹² US Bureau of Labor Statistics (2017). Consumer Price Index 2016-2017.

¹³ United States Treasury Department (2017). Historic rates of returns on I-bonds, 1998 – 2017.

3.2.4 Part 4 – Operation and maintenance

The rule amendments could result in costs for product deliverers or waste oil collectors, however, it is expected that they are already complying with spill and overfill control requirements.

Expected additional costs for owners include costs associated with the updated walkthrough inspections and record retention durations.

Walkthrough inspections:

The federal rule requires annual walkthrough inspections beginning three years after the federal effective date. The rule amendments require that inspections must begin upon installation (for systems installed after effective date) or one year after the effective date of the rule (for systems installed on or before effective date). This will result in an additional 2-3 walkthrough inspections per site. These may be conducted by the owner or operator and are estimated to take roughly an hour.

Other additional testing:

Further additional testing resulting from the rule includes:¹⁴

- 1) Spill bucket testing once every three years, this is for all spill buckets.
 - This is conducted by a service provider and there is a spill bucket for each of the 9,000 regulated USTs in Washington.
 - Estimated cost is \$100 per test.
 - Half of these will occur in two years from the effective date of the rule amendments, one year earlier than the federal rule requires. The remainder will occur in three years?
 - Aggregate cost attributable to the rule is the cost of one test per tank, or \$435,000.
- 2) Overfill devices once every three years.
 - This is conducted by a service provider and there is an overfill device for each of the 9,000 regulated USTs in Washington.
 - Estimated cost is roughly \$100 per test.
 - Half of these will occur in two years, one year earlier than the federal rule requires.
 - Aggregate cost attributable to the rule is the cost of one test per tank, or \$435,000.
- 3) Testing of sumps used for interstitial monitoring once every three years.
 - This is conducted by a service provider and there are roughly 2,000 sumps used for interstitial monitoring at UST sites in Washington.
 - Estimated cost is roughly \$200 per test.

¹⁴ Note: Federal rule requires these tests begin three years after federal effective date. The rule requires them to begin sooner, therefore, the costs associated with any required testing prior to the three-year federal start date is attributable to the rule amendments.

- Half of these will occur in two years, one year earlier than the federal rule requires.
- Aggregate cost attributable to the rule is the cost of one test per tank at half of the sumps, or \$193,000.

This results in an estimated 20-year present value¹⁵ of approximately of \$1.06 million.

Records need to be kept an additional two years under the rule.

Also, costs may accrue for use of certified service provider for tightness tests, overflow prevention equipment inspections, release detection equipment inspections, and repairs to system components; as well as reporting of these inspections and retention of these records. Costs will depend on the service provider and how many tanks are at the site. Costs are estimated to range from \$400 - \$900 per additional action.

3.2.5 Part 5 – Operator training

The rule amendments result in likely costs for companies providing training in the form of updating training programs. These costs will vary depending on the existing training program.

This updating is estimated to cost \$120 - \$480 based on one to four hours of a Training and Development manager's time, a \$50.88 hourly wage¹⁶ multiplied by a factor of 2.257 for overhead,¹⁷ and an inflation adjustment of 2.7 percent.¹⁸

3.2.6 Part 6 – Release detection

The rule amendments will likely result in increased costs to the system owners in the form of increased record retention. These increases will be minimal.

Additional costs may accrue due to updating tank gauging equipment to measure water levels. All electronic systems already have this capability. If the owner does not have an electronic system, this requirement could be met using a tank stick, which costs roughly \$20 and a tube of water finding paste, which costs roughly \$10. Ecology does not have information on how many owner/operators this will impact.

3.2.7 Part 7 – Release reporting, confirmation, and cleanup

The rule amendments create potential costs to system operators, of conducting additional sampling when conducting a site assessment under limited circumstances. These site assessment costs will be site-specific if they occur.

The shortened timeframe for service providers to report confirmed releases being consistent with the requirements for owners and operators is not likely to impact reporting times baseline as owner and operator requirements are more stringent.

¹⁵ United States Treasury Department (2017). Historic rates of returns on I-bonds, 1998 – 2017.

¹⁶ United States Bureau of Labor Statistics 2016 https://www.bls.gov/oes/current/oes_nat.htm#11-0000 for wage type 11-3131.

¹⁷ WA Department of Ecology (2016). Ecology 2017 Standard Cost assumptions. December 2, 2016.

¹⁸ US Bureau of Labor Statistics (2017). Consumer Price Index 2016-2017.

3.2.8 Part 8 – Closure

The rule amendments will likely result in costs to the system owner in the form of either measuring or removing any substances in the system for temporary closure. Owners are expected to use the least-cost option, and measurement is likely minimal effort of checking existing measurement devices.

Other potential costs include a preliminary evaluation of structural integrity (such as a pressure decay test) when an UST system is temporarily closed for more than 90 days then returned to operation. These evaluations will be performed by service providers and are estimated to cost \$700. These are estimated to occur roughly 30 times per year, which converts to a 20-year present value¹⁹ of approximately \$360,000.

3.2.9 Part 9 – Service providers

The rule amendments will likely result in additional costs to system owners as service providers will need certification and will likely charge more because of it. The cost of a single certification at a service provider, spread across multiple customers, will have an undetermined effect on individual prices charged by service providers, and on overall market price. Limited service providers spreading costs across multiple customers would impose minimal additional price increases on customers.

3.2.10 Part 10 – Financial responsibility

Costs may accrue due to submission of certification of financial responsibility and certificate of insurance or endorsement. These costs will be minimal, as the UST system owner will have ready access to these materials.

3.2.11 Creating a new chapter, Chapter 173-360A WAC to replace Chapter 173-360 WAC, which will be repealed.

These rule amendments are not expected to create costs.

¹⁹ United States Treasury Department (2017). Historic rates of returns on I-bonds, 1998 – 2017.

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Chapter 4: Likely Benefits of the Rule Amendments

4.1 Introduction

This chapter estimates the likely benefits associated with the rule amendments, as compared to the baseline (both of which are described in Chapter 2 of this document).

4.2 Benefit analysis

The vast majority of the expected benefits of the rule amendments accrue from decreasing the likelihood of a release due to tank leakage or failure. In the event a release occurs in an UST system, the leak must be reported to the regional Ecology office within 24 hours of receiving sampling results. All products must be removed from the UST system identified as leaking in order to prevent further releases and an environmental contractor must be hired to begin any cleanup required under the Model Toxics Control Act, Chapter 173-340 WAC. The cost of these activities could range from \$10,000 to as much as \$1,000,000 per site. Additionally, a release from a regulated UST will result in hazardous substances entering the environment and posing a threat to human health and the environment, including surface and drinking water.

While Ecology does not have specific estimates on how much each amendment will impact the chances of a release, the impacts accumulate over time. For example, a decrease chance of a release of 0.05 percent per year will result in an aggregate decrease of 1.0 percent over the 20-year period of study. *Each* one percent decrease in the chance of a release over the course of the 20-year timeframe of this analysis would be 90 fewer releases based on the current total of 9,000 currently regulated USTs. This means the estimated benefits for *each* one percent decrease ranges from \$900k to \$90 million. This is in addition to the benefits to human health and the environment resulting from less releases.

4.2.1 Part 1 – Scope and definitions

Systems storing more than 1,100 gallons of heating oil were previously subject to the release reporting provisions of the rule. However, this duplicates requirements under chapter 173-340 WAC MTCA. Exempting them in this chapter eliminates duplicate reporting.

We estimated this cost saving based on 0.1 hours of reporting clerk's time, a \$15.24 hourly wage²⁰ multiplied by a factor of 2.257 for overhead,²¹ and an inflation adjustment of 2.7 percent.²²

²⁰ United States Bureau of Labor Statistics 2016 https://www.bls.gov/oes/current/oes_nat.htm#43-0000 for wage type 43-4000.

²¹ WA Department of Ecology (2016). Ecology 2017 Standard Cost assumptions. December 2, 2016.

²² US Bureau of Labor Statistics (2017). Consumer Price Index 2016-2017.

This results in a cost savings of \$3.53. Based on an assumed 20 occurrences per year, this results in a 20-year present value²³ of approximately \$1,200.

Partially exempt UST systems are no longer subject to some notification requirements and a site assessment upon closure.

We estimated the cost of a site assessment based on 4 hours of environmental engineering technician's time, a \$25.24 hourly wage²⁴ multiplied by a factor of 2.257 for overhead,²⁵ and an inflation adjustment of 2.7 percent.²⁶

This results in an estimated cost savings of \$235 per site.

4.2.2 Part 2 – Administration and enforcement

We expect these rule amendments to benefit system owners in the form of decreased requirements and fees.

We are eliminating specific requirements on where records must be maintained, as going forward, most records will be kept electronically. We cannot confidently estimate this savings, however it will be small.

Though we are eliminating the requirement that owners must pay tank fees after an UST system has undergone permanent closure or a change-in-service, this is not expected to create actual benefits, as these fees are not currently practicable to collect these fees.²⁷

We expect these changes to benefit system owners in the form of decreased requirements and improve the rate at which records are transferred at the point of sale.

4.2.3 Part 3 – Installation and performance standards

Under the rule amendments owners will be able to choose to demonstrate that the environment around an UST system is not corrosive enough to cause the system to have a release due to corrosion during its operational life. This demonstration could mean that the owner is not required to get cathodic protection for metal tanks and piping. Owners benefit by choosing the less expensive of these options.

Benefits will also accrue due to improved communication and aligning requirements. Also, ensuring that Ecology is present at installation will discourage poor practices that may have been used in installation previously.

²³ United States Treasury Department (2017). Historic rates of returns on I-bonds, 1998 – 2017.

²⁴ United States Bureau of Labor Statistics 2016 https://www.bls.gov/oes/current/oes_nat.htm#17-0000 for wage type 17-3025.

²⁵ WA Department of Ecology (2016). Ecology 2017 Standard Cost assumptions. December 2, 2016.

²⁶ US Bureau of Labor Statistics (2017). Consumer Price Index 2016-2017.

²⁷ Tank fees pay for the UST prevention program, a closed UST is not inspected/regulated by the prevention program and thus should not pay fees. Also, it is not practicable to find past owners once property is sold. Also, it is not practicable to collect the fees even if we could find the owner at the time of closure. Fees are paid when licenses are renewed; there are no longer any tanks to license.

4.2.4 Part 4 – Operation and maintenance

The rule amendments could result in benefits in the form of lessening the chance of a release to occur due to the use of certified service provider for tightness tests, overflow prevention equipment inspections, release detection equipment inspections, and repairs to system components. As there is no way to accurately estimate the difference in releases, we are including this as a qualitative benefit.

Additionally, potential benefits could result from greater ability for Ecology to identify trends in reporting data and decreasing the probability of a release.

4.2.5 Part 5 – Operator training

The rule amendments result in likely benefits due to avoided retraining through the grandfather clause.

4.2.6 Part 6 – Release detection

The rule amendments will likely result in benefits in being better able to identify trends in the data and gauging the water levels in tanks. These benefits take the form of better identification of potential problems, decreasing the chance of a release to occur. As there is no way to accurately estimate the difference, we are including this as a qualitative benefit.

4.2.7 Part 7 – Release reporting, confirmation, and cleanup

The rule amendments create potential benefits in having minimum sampling requirements for site assessments. These benefits take the form of decreasing the chance of a release being missed during assessment. As there is no way to accurately estimate the difference, we are including this as a qualitative benefit.

4.2.8 Part 8 – Closure

The rule amendments do not allow temporary closed tanks to have product in them for an extended period of time (more than 90 days), which reduces the chances of releases to the environment.

Potential benefits also accrue from less record retention. Also, 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. A site assessment is not needed if a release had previously been confirmed and further remedial action is needed to clean up the confirmed release, decreasing the costs on the owner/operator.

4.2.9 Part 9 – Service providers

Potential benefits include providing consistency in the methods used to conduct testing, ensuring proper sampling, and alignment of release reporting to eliminate confusion. The rule amendments could result in benefits in the form of decreasing the chance of a release to occur due to the required use of service providers with specific certifications, service providers being present when decommissioning, and aligning of reporting requirements. As there is no way to accurately estimate the difference, we are including this as a qualitative benefit.

4.2.10 Part 10 – Financial responsibility

The rule amendments likely create benefits for system owners by allowing periods where financial responsibility need not be maintained. This potentially opens the funds to be used elsewhere by system operators, for example alternative investments.

4.2.11 Creating a new chapter, Chapter 173-360A WAC, and repealing Chapter 173-360

As part of this rulemaking we are adopting a new chapter to replace the previous rule chapter. We have reorganized language and improved clarity with the intent of making it easier to use the chapter.

Chapter 5: Cost-Benefit Comparison and Conclusions

5.1 Summary of the costs and benefits of the rule amendments

The potential costs for the rule amendments include:

- Notification.
- Reporting.
- Record retention.
- Demonstration of compatibility.
- Corrosion assessment.
- Additional testing.
- Walkthrough inspections.
- Updating training programs.
- Evaluation of structural integrity.

While some of the costs only occur under some specific circumstances, others apply overall. Table 1 includes all of the costs for which we estimated costs in Chapter 3. Additional costs exist, however we were not able to accurately estimate the aggregate costs (see Chapter 3 for more detail). However, they are small in nature and would be overwhelmed by the costs that are aggregated below.

Table 1. Aggregate costs of the rule amendments

Cost Type	20-year present value
Corrosion assessment including reporting	\$13,135*
Additional testing requirements	\$1,060,000
Evaluation of structural integrity	\$360,000
Total	\$1,433,135

*20-year present value includes both corrosion assessments and reporting costs of corrosion assessment. See section 3.2.3.

The rule amendments are estimated to create 20-year present value costs of \$1.4 million.

The potential benefits of the rule amendments include:

- Decreased costs for owners for reporting, record retention, and notification.
- Elimination of cathodic protection in some circumstances.
- Elimination of the need for financial responsibility in some circumstances.
- Environmental, health, and property benefits due to lessening chance for a release.

While some of the benefits only occur under specific circumstances, others apply universally. Additional benefits exist, but we were not able to accurately estimate the aggregate benefits (see Chapter 4 for more detail). Those benefits are included qualitatively.

Table 2. Aggregate benefits of the rule amendments

Cost Type	Low estimate	High estimate
Decreased chance of release	\$900 thousand per 1% decrease	\$90 million per 1% decrease
Eliminating duplicate reporting requirements	\$1,200	\$1,200

The rule amendments are estimated to create 20-year present value benefits of \$900 thousand to \$90 million for *each* one-percent aggregate decrease in the chance of a release. This is in addition to the \$1,200 estimated for eliminating duplicative reporting requirements.

5.2 Conclusion

Ecology determines, based on reasonable understanding of the quantified and qualitative costs and benefits likely to arise from the rule amendments, that the benefits of the rule amendments are greater than the costs.

Chapter 6: Least-Burdensome Alternative Analysis

6.1 Introduction

RCW 34.05.328(1)(e) requires Ecology to “[d]etermine, after considering alternative versions of the rule and the analysis required under (b), (c), and (d) of this subsection, that the rule being adopted is the least burdensome alternative for those required to comply with it that will achieve the general goals and specific objectives stated under (a) of this subsection.” The referenced subsections are:

- (a) Clearly state in detail the general goals and specific objectives of the statute that the rule implements;
- (b) Determine that the rule is needed to achieve the general goals and specific objectives stated under (a) of this subsection, and analyze alternatives to rule making and the consequences of not adopting the rule;
- (c) Provide notification in the notice of proposed rulemaking under RCW 34.05.320 that a preliminary cost-benefit analysis is available. The preliminary cost-benefit analysis must fulfill the requirements of the cost-benefit analysis under (d) of this subsection. If the agency files a supplemental notice under RCW 34.05.340, the supplemental notice must include notification that a revised preliminary cost-benefit analysis is available. A final cost-benefit analysis must be available when the rule is adopted under RCW 34.05.360;
- (d) Determine that the probable benefits of the rule are greater than its probable costs, taking into account both the qualitative and quantitative benefits and costs and the specific directives of the statute being implemented;

In other words, to be able to adopt the rule, Ecology is required to determine that the contents of the rule are the least burdensome set of requirements that achieve the goals and objectives of the authorizing statute(s).

Ecology assessed alternative rule content and determined whether they met the goals and objectives of the authorizing statutes. Of those that would meet these goals and objectives, Ecology determined whether those chosen for the rule amendments were the least burdensome to those required to comply with them.

6.2 Goals and objectives of the authorizing statute: Chapter 90.76 RCW

The amendments to the Underground Storage Tank Regulations, Chapter 173-360 WAC, implement the general goals and specific objectives of Chapter 90.76 RCW Underground Storage Tanks.

In Chapter 90.76 RCW, the Legislature directs the Ecology to establish a state-wide UST program and adopt rules that:

- Meet the federal requirements for state program approval, as specified in 40 C.F.R. Part 281;
- Are consistent with and no less stringent than the federal regulations, as specified in 40 C.F.R. Part 280;
- Reduce the number and severity of releases of petroleum and other hazardous substances from UST systems, which pose a serious threat to human health and the environment (RCW 90.76.005 and 90.76.020).

The Legislature also specifies what the rules adopted by Ecology must address at a minimum (RCW 90.76.020).

In 1990, Ecology adopted the following rules to achieve these statutory goals and objectives:

- Chapter 173-360 WAC, which establishes requirements for UST systems to prevent releases of petroleum and other hazardous substances.
- Section 450 of the MTCA Cleanup, Chapter 173-340 WAC, which regulation establishes requirements for responding to and cleaning up releases from UST systems.

In 1993, the EPA approved Washington State's UST program. The State was one of the first states in the nation to be granted state program approval.

6.3 Alternatives considered and why they were not included

6.3.1 Provide additional notice only when planned start date changes

Ecology considered requiring additional notice of planned start date for installation of UST systems and components only when start date changes, as opposed to three days prior to starting installation. This alternative would not have met the goals and objectives of the authorizing statute.

6.3.2 Set walkthrough inspections to begin at three years

Ecology considered setting the compliance date at three years for all UST systems walkthrough inspections. This alternative would not have met the goals and objectives of the authorizing statute.

6.4 Conclusion

After considering alternatives to the adopted rule's contents, as well as the goals and objectives of the authorizing statute, Ecology determined that the adopted rule represents the least-burdensome alternative of possible rule contents meeting these goals and objectives.

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Chapter 7: Regulatory Fairness Act Compliance

7.1 Introduction

The Regulatory Fairness Act (RFA; RCW 19.85.070) requires Ecology to perform a set of analyses and make certain determinations regarding the rule amendments.

This chapter presents the:

- Results of the analysis of relative compliance cost burden.
- Consideration of lost sales or revenue.
- Cost-mitigating action taken by Ecology, if required.
- Small business and local government consultation.
- Industries likely impacted by the rule amendments.
- Expected net impact on jobs statewide.

A small business is defined by the RFA as having 50 or fewer employees. Estimated costs are determined as compared to the existing regulatory environment—the regulations in the absence of the rule amendments. The RFA only applies to costs to “businesses in an industry” in Washington State. This means that impacts, for this document, are not evaluated for non-profit or government agencies.

The existing regulatory environment is called the “baseline” in this document. It includes only existing laws and rules at federal and state levels.

7.2 Quantification of Cost Ratios

When determining the proportionality of impacts, Ecology typically compares small businesses (those with 50 or fewer employees) to the largest 10 percent of businesses in the industry. In the current analyses, small businesses represent more than 90 percent of all businesses in the affected industries (as identified by North American Industry Classification System (NAICS) code, see below). For this reason, Ecology is comparing the impacts on small businesses with large businesses (those with more than 50 employees).

Small businesses impacted by the rule amendments average 7.8 employees. Large businesses average 127 employees. Because large businesses have 16.3 times as many employees as small businesses in these industries, in order for the imposed costs to be proportional, they would need to be 16.3 times as large for large businesses as for small businesses. While it makes intuitive sense that larger businesses would have more tanks (and therefore face higher costs), this is not universally accurate. Further, it is highly unlikely that these costs would be 16 times higher.

Therefore, we conclude that the rule amendments are likely to have disproportionate impacts on small businesses, and therefore Ecology must include elements in the rule amendments to

mitigate this disproportion, as far as is legal and feasible.

7.3 Loss of sales or revenue

Businesses that will incur costs could experience reduced sales or revenues if the incurred costs significantly affect the prices of the goods they sell. The degree to which this could happen is strongly related to each business's production and pricing model (whether additional lump-sum costs significantly affect marginal costs), as well as the specific attributes of the markets in which they sell goods, including the degree of influence of each firm on market prices, as well as the relative responsiveness of market demand to price changes.

7.4 Action Taken to Reduce Small Business Impacts

The RFA (19.85.030(2) RCW) states that:

Based upon the extent of disproportionate impact on small business identified in the statement prepared under RCW [19.85.040](#), the agency shall, where legal and feasible in meeting the stated objectives of the statutes upon which the rule is based, reduce the costs imposed by the rule on small businesses. The agency must consider, without limitation, each of the following methods of reducing the impact of the proposed rule on small businesses:

- a) Reducing, modifying, or eliminating substantive regulatory requirements;
- b) Simplifying, reducing, or eliminating recordkeeping and reporting requirements;
- c) Reducing the frequency of inspections;
- d) Delaying compliance timetables;
- e) Reducing or modifying fine schedules for noncompliance; or
- f) Any other mitigation techniques including those suggested by small businesses or small business advocates.

Ecology considered all of the above options, and included the following legal and feasible elements in the rule amendments that reduce costs.

- Adding exclusions, exceptions, and clarifications to prevent overlapping regulatory requirements.
- Eliminating some requirements for partially exempt UST systems.
- Lessening requirements for when site assessments must occur.

7.5 Small Business and Government Involvement

Ecology involved small businesses and local government (or representative organizations) in its development of the rule amendments, as part of its outreach and rule-development process. This included:

- Email listserv “Ecology-UST-RULE LIST”, with 315 current members, including industry groups, cities, and counties.
- Stakeholder meetings – attendees and invitees:
 - SME Solutions
 - Albertsons
 - Automotive United Trades Organization (AUTO)
 - BP
 - Century Link
 - Costco
 - Fred Meyers
 - Jackson’s Food
 - Korean American Grocers Association of Washington (KAGRO)
 - Northwest Tank
 - Northwest Grocers Association
 - Puget Sound Energy (PSE)
 - Quality Food Centers (QFC)
 - Safeway
 - Shell
 - Tesoro
 - Underground Storage Tank Service Providers
 - Washington Oil Marketers Association (WOMA)
 - Western States Petroleum Association (WSPA)

7.6 NAICS Codes of Impacted Industries

The rule amendments are likely to impact the following NAICS codes:

- 2111: Oil and Gas Extraction
- 2121: Coal Mining
- 2122: Metal Ore Mining
- 2123: Nonmetallic Mineral Mining and Quarrying
- 2131: Support Activities for Mining
- 2211: Electric Power Generation, Transmission and Distribution
- 2212: Natural Gas Distribution

- 2213: Water, Sewage and Other Systems
- 3241: Petroleum and Coal Products Manufacturing
- 3361: Motor Vehicle Manufacturing
- 4231: Motor Vehicle and Motor Vehicle Parts and Supplies Merchant Wholesalers
- 4247: Petroleum and Petroleum Products Merchant Wholesalers
- 4411: Automobile Dealers
- 4412: Other Motor Vehicle Dealers
- 4471: Gasoline Stations
- 4811: Scheduled Air Transportation
- 4812: Nonscheduled Air Transportation
- 4821: Rail Transportation
- 4831: Deep Sea, Coastal, and Great Lakes Water Transportation
- 4841: General Freight Trucking
- 4842: Specialized Freight Trucking
- 4851: Urban Transit Systems
- 4852: Interurban and Rural Bus Transportation
- 4853: Taxi and Limousine Service
- 4854: School and Employee Bus Transportation
- 4855: Charter Bus Industry
- 4859: Other Transit and Ground Passenger Transportation
- 4861: Pipeline Transportation of Crude Oil
- 4862: Pipeline Transportation of Natural Gas
- 4869: Other Pipeline Transportation
- 4871: Scenic and Sightseeing Transportation, Land
- 4872: Scenic and Sightseeing Transportation, Water
- 4879: Scenic and Sightseeing Transportation, Other
- 4881: Support Activities for Air Transportation
- 4882: Support Activities for Rail Transportation
- 4883: Support Activities for Water Transportation
- 4884: Support Activities for Road Transportation
- 4889: Other Support Activities for Transportation
- 4911: Postal Service

- 4921: Couriers and Express Delivery Services
- 5321: Automotive Equipment Rental and Leasing
- 5621: Waste Collection
- 5622: Waste Treatment and Disposal
- 6221: General Medical and Surgical Hospitals
- 6222: Psychiatric and Substance Abuse Hospitals
- 6223: Specialty (except Psychiatric and Substance Abuse) Hospitals
- 6231: Nursing Care Facilities (Skilled Nursing Facilities)
- 7112: Spectator Sports
- 7139: Other Amusement and Recreation Industries
- 8111: Automotive Repair and Maintenance
- 9281: National Security and International Affairs

7.7 Impact on Jobs

Ecology used the Washington State Office of Financial Management's 2007 Washington Input-Output Model²⁸ to estimate the impact of the rule amendments on jobs in the state. The model accounts for inter-industry impacts and spending multipliers of earned income and changes in output.

The rule amendments will result in transfers of money within and between industries. Jobs impact calculations were based on cost increases and reductions over the 20-year period of study that could be quantified for the rule amendments.

It is estimated that the state will experience a net increase in employment of two jobs as a result of the rule over the 20-year period of study.

These prospective changes in overall employment in the state are the sum of multiple small increases and decreases across all industries in the state.

²⁸ See the Washington State Office of Financial Management's site for more information on the Input-Output model. <http://www.ofm.wa.gov/economy/io/2007/default.asp>

References

US Bureau of Labor Statistics (2016). 2016 Wages by Area and Occupation. Washington State.

US Bureau of Labor Statistics (2017). Consumer Price Index 2016-2017.

US Treasury Department (2017). Historic rates of return on I-Bonds, 1998 – 2017.

WA Department of Ecology (2016). Ecology 2017 Standard Cost assumptions. December 2, 2016.

List of Acronyms

1. APA Washington Administrative Procedure Act
2. AUTO Automotive United Trades Organization
3. CBA Cost-Benefit Analysis
4. C.F.R. Code of Federal Regulations
5. DOR Washington State Department of Revenue
6. Ecology Washington State Department of Ecology
7. EPA United States Environmental Protection Agency
8. KAGRO Korean American Grocers Association of Washington
9. LBA Least-Burdensome Alternative Analysis
10. MTCA Model Toxics Control Act
11. NAICS North American Industry Classification System
12. PLIA Pollution Liability Insurance Agency
13. PSE Puget Sound Energy
14. RCW Revised Code of Washington
15. RFA Regulatory Fairness Act
16. UDC Under Dispenser Containment
17. UST Underground Storage Tank
18. WAC Washington Administrative Code
19. WOMA Washington Oil Marketers Association
20. WSPA Western States Petroleum Association

Appendix A

Administrative Procedure Act (RCW 34.05.328)

Determinations

A. RCW 34.05.328(1)(a) – Clearly state in detail the general goals and specific objectives of the statute that this rule implements.

See Chapter 6.

B. RCW 34.05.328(1)(b) –

1. Determine that the rule is needed to achieve the general goals and specific objectives of the statute.

See chapters 1 and 2.

2. Analyze alternatives to rulemaking and the consequences of not adopting this rule.

The rule amendments are necessary to:

a. Maintain federal approval of the state’s UST program, as required by the authorizing state statute, Chapter 90.76 RCW.

If Ecology fails to adopt rules to incorporate the federal rule changes, as specified in 40 C.F.R. Parts 280 and 281, the State would likely lose federal approval of its UST program. The State could also lose federal grant funding, which helps support the program. To maintain a viable UST program, lost federal funding would need to be replaced with state funding, which would likely come from higher fees on tank owners. Ecology could also be subject to legal challenges for failing to comply with the mandatory requirements of Chapter 90.76 RCW.

b. Reduce the number and severity of releases of petroleum and other hazardous substances from UST systems, which pose a serious threat to human health and the environment, including drinking water.

Ecology currently regulates about 9,000 systems at more than 3,300 facilities throughout the State. A majority of the systems are located at gas stations. Other systems are owned and operated by other types of businesses and by local, state and federal governments. Each year, about 50 new releases are confirmed at regulated facilities. Failure to adopt the rule amendments would likely result in more releases or more severe releases than would otherwise occur. Please see the Least Burdensome Alternative Analysis, Chapter 6 of this document, for discussion of alternative rule content considered.

C. RCW 34.05.328(1)(c) - A preliminary cost-benefit analysis was made available.

When filing a rule proposal (CR-102) under RCW 34.05.320, Ecology provides notice that a preliminary cost-benefit analysis is available. At adoption (CR-103 filing) under RCW 34.05.360, Ecology provides notice of the availability of the final cost-benefit analysis.

- D. RCW 34.05.328(1)(d) – Determine that probable benefits of this rule are greater than its probable costs, taking into account both the qualitative and quantitative benefits and costs and the specific directives of the statute being implemented.**

See Chapters 1 – 5.

- E. RCW 34.05.328 (1)(e) - Determine, after considering alternative versions of the analysis required under RCW 34.05.328 (b), (c) and (d) that the rule being adopted is the least burdensome alternative for those required to comply with it that will achieve the general goals and specific objectives stated in Chapter 6.**

Please see Chapter 6 and record for rulemaking.

- F. RCW 34.05.328(1)(f) - Determine that the rule does not require those to whom it applies to take an action that violates requirements of another federal or state law.**

The Underground Storage Tank Regulations adopted in Chapter 173-360A WAC do not require those to whom they apply to take an action that violates requirements of another federal or state law.

Federal Law

First, Washington’s UST program is approved by the U.S. Environmental Protection Agency (EPA). This means that Washington’s UST owners and operators are subject to state regulation, and generally the Department of Ecology’s (Ecology’s) inspections and enforcement. This also means that when EPA does take an enforcement action in this state, EPA enforces the state’s regulations.

Second, Washington’s UST program must be consistent with and no less stringent than the federal program. In the authorizing statute (RCW 90.76.005), the Legislature directed Ecology to establish an UST program and adopt rules that:

1. Meet the federal requirements for state program approval, as specified in 40 C.F.R. Part 281; and
2. Are consistent with and no less stringent than the federal regulations, as specified in 40 C.F.R. Part 280.

Throughout the rulemaking process, Ecology has consulted with EPA to ensure that the rules being developed meet the federal requirements for state program approval. Ecology made changes to the preliminary draft based on EPA’s comments. EPA has confirmed that the rules meet federal requirements.

Other Washington State Laws

In the authorizing statute, Chapter 90.76 RCW, the Legislature specified that, with certain exceptions, “the rules adopted under this chapter supersede and preempt any state or local under-ground storage tank law, ordinance, or resolution governing any aspect of regulation covered by the rules adopted under this chapter” (RCW 90.76.110(1)). This preemption aside, nothing in the rule amendments would cause a person to be in violation of state law.

G. RCW 34.05.328 (1)(g) - Determine that rule the does not impose more stringent performance requirements on private entities than on public entities unless required to do so by federal or state law.

No. The rule amendments adopted by the Department of Ecology (Ecology) do not impose more stringent performance requirements on private entities than on public entities in the rule amendments.

Except for financial responsibility, the rule requirements do not make any distinction between public and private entities.

For financial responsibility, the adopted rules:

- Exempt from financial responsibility requirements state and federal government entities whose debts and liabilities are the debts and liabilities of a state or the United States” (WAC 173-360-400(3) and 173-360A-1000(3)).
- Provide different financial assurance mechanisms for local government entities and private entities (see Part 4 of Chapter 173-360 WAC and Part 10 of Chapter 173-360A WAC).

These differences are reflected in the federal rule (see Subpart H of 40 C.F.R. Part 280). Notably, federal law also requires agencies of the federal government to comply with “all Federal, State, interstate, and local requirements, both substantive and procedural (including any requirement for permits or reporting or any provisions for injunctive relief and such sanctions as may be imposed by a court to enforce such relief), respecting underground storage tanks in the same manner, and to the same extent, as any person is subject to such requirements, including the payment of reasonable service charges” (42 U.S.C. 6991f(a)).

H. RCW 34.05.328 (1)(h) Determine if the rule differs from any federal regulation or statute applicable to the same activity or subject matter.

Yes.

If yes, the difference is justified because of the following:

- (i) A state statute explicitly allows Ecology to differ from federal standards. [If checked, provide the citation included quote of the language.]
- (ii) Substantial evidence that the difference is necessary to achieve the general goals and specific objectives stated in Chapter 6.

Other Agencies with Regulatory Authority

The following federal, state, and local agencies have the authority to regulate underground storage tanks.

Federal Agencies

The U.S. Environmental Protection Agency (EPA) has the authority under Subtitle I of the Solid Waste Disposal Act (42 U.S.C. Chapter 82, Subchapter IX) to regulate UST systems throughout the country, including in Washington State. Under that authority, EPA has established a federal UST program (40 C.F.R. Part 280) and requirements for state program approval (40 C.F.R. Part 281). If a state UST program is approved by EPA, then only the state’s requirements are applicable in that state (except within Indian country). Washington State currently has a federally-approved UST program.

In June 2015, EPA adopted changes to the federal UST rule (40 C.F.R. Part 280). The changes add new operation and maintenance requirements for UST systems and establish requirements for certain types of UST systems deferred in the original federal rules. EPA also adopted changes to the state program approval requirements (40 C.F.R. Part 281) to reflect the changes in the federal UST rule. To maintain approval of our UST program, Ecology must incorporate the new federal requirements and reapply for state program approval by October 2018.

State Agencies

The Department of Revenue (DOR) is responsible for licensing regulated UST systems under Chapter 90.76 RCW. Owners and operators of UST systems must have a license to operate the systems. The license takes the form of a tank endorsement on the UST facility's business license issued by DOR under Chapter 19.02 RCW. The license must be renewed annually. As part of the licensing system, DOR also enters and tracks data on UST systems, including financial responsibility. DOR does not have the authority to regulate UST systems.

The Pollution Liability Insurance Agency (PLIA) is responsible for establishing and managing a pollution liability reinsurance program for regulated UST systems under Chapter 70.148 RCW. The purpose of the reinsurance program is to reduce the cost of obtaining private insurance, which is one of the means of satisfying the financial responsibility requirements under the UST program. PLIA does not have the authority to regulate UST systems.

The State Building Code Council is responsible for adopting and maintaining the International Fire Code under Chapter 19.27 RCW. The provisions of the Code regulate certain aspects of UST systems. A county or city is authorized to amend the Code as it applies within their jurisdiction. However, as explained below, any provision of the Code that is more stringent than or in conflict with the rules adopted under Chapter 90.76 RCW are superseded and preempted.

Local Government

In the authorizing statute, Chapter 90.76 RCW, the Legislature specified that, with certain exceptions, “the rules adopted under this chapter supersede and preempt any state or local under-ground storage tank law, ordinance, or resolution governing any aspect of regulation covered by the rules adopted under this chapter” (RCW 90.76.110(1)). The exceptions include:

- Provisions of the International Fire Code adopted under Chapter 19.27 RCW, which are not more stringent than, and do not directly conflict with, rules adopted under this chapter;
- Local laws, ordinances, and resolutions pertaining to local authority to take immediate action in response to a release of a regulated substance;
- City, town, or county underground storage tank ordinances that are more stringent than the federal regulations and the uniform codes adopted under Chapter 19.27 RCW and that were in effect on or before November 1, 1988; and

- 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 existence prior to July 1, 1990 (RCW 90.76.110).

In addition, local governments have the authority under Chapter 90.76 RCW to “adopt proposed ordinances or resolutions establishing requirements for underground storage tanks located within an environmentally sensitive area that are more stringent than the state-wide standards established under RCW 90.76.020” (RCW 90.76.040(2)). To date, none have been adopted.

I. RCW 34.05.328 (1)(i) – Coordinate the rule, to the maximum extent practicable, with other federal, state, and local laws applicable to the same subject matter.

For a description of other federal, state, and local agencies with the authority to regulate USTs, see response above.

U.S. Environmental Protection Agency

Ecology has consulted with the U.S. Environmental Protection Agency (EPA) throughout the rulemaking process to ensure the rules comply with the minimum federal requirements.

- Ecology provided EPA with an opportunity to comment on the preliminary draft of the rule and met with EPA to discuss their comments and concerns. EPA has confirmed that the rule meets federal requirements for state program approval. At Ecology’s request, EPA also clarified its interpretation of several provisions of the federal UST regulations. The rule reflects those clarifications.
- Ecology provided EPA an opportunity to comment on the proposed rule, and consulted with EPA before making any changes based on public comments.

State Agencies

Ecology has consulted with the Department of Revenue throughout the rulemaking process to ensure the adopted rules reflect the licensing process under Chapter 19.02 RCW and the needs of both agencies.

Ecology has consulted with the Pollution Liability Insurance Agency throughout the rulemaking process on any proposed changes to the financial responsibility requirements.

Ecology has consulted, as appropriate, with the State Building Code Council, to ensure coordination with the building and fire codes adopted under Chapter 19.27 RCW.

Ecology provided each of these agencies with an opportunity to review and comment on the preliminary draft of the rule. PLIA provided comments on the preliminary draft, which have been incorporated into the rule. All of the agencies also had an opportunity to review and comment on the proposed rule. Ecology considered all comments received.

Local Governments

Ecology provided local governments that regulate aspects of UST systems within their jurisdictions the opportunity to review and comment on the preliminary draft in July 2017. Ecology also consulted with some of those local governments. No comments were submitted. Ecology provided all local governments that regulate UST systems or that own regulated UST systems the opportunity to review and comment on the proposed rule. Ecology considered all comments received.

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