



Sump Testing

1. What are the requirements for double-walled containment sumps and double-walled spill buckets?

Answer: Double-walled containment sumps and spill buckets are excluded from the triannual testing requirement if both inner and outer walls of the sump/spill bucket are monitored every 30 days. This means that only liquid- or vacuum-constructed sumps/spill buckets qualify for the triannual testing exemption. Double-walled spill buckets, such as the OPW “Edge” model, have open-air interstitial spaces and do not qualify for this testing exemption. See [OAR 340-150-0310\(8\)](#) for specific reference.

2. What test methods are allowable in Oregon for the triannual sump and spill bucket-testing requirement?

Answer: As described in [340-150-0310\(8\)\(b\)\(A-C\)](#), acceptable test methods include any manufacturer-developed method or a code of practice by a nationally recognized industry association (e.g., [PEI RP-1200](#)). As described in the low-level sump testing section, EPA has recently produced [guidance](#) on low-level sump testing that is acceptable in Oregon.

3. Is an audible and visual alarm necessary when performing low-level sump testing as part of the interstitial monitoring piping leak detection method?

Answer: The EPA [guidance](#) published in June 2018 includes language in the Required Conditions section that states, “You may only use these instructions if your sensors are programmed to both alarm and shut off when in contact with any liquid.” This means that ‘stand-alone’ sensors (e.g., Franklin DC 400 series sensors) can only be used if they provide some sort of alarm, in addition to the shutdown action. This is true regardless of whether the site is attended or unattended when low-level sump testing occurs. DEQ also recognizes that some sites have previously been told they were in compliance with stand-alone sump sensors. However, those approvals were prior to the federal and state rule revision and the new low-level sump-testing requirement published by the EPA.

4. Can an owner or permittee perform their own spill bucket testing or other types of testing and do they have to have a supervisor’s license?

Answer: An owner or permittee can perform UST services at their own facilities, including testing, installation and modification work, as long as they have completed the appropriate [International Code Council](#) (ICC) exam for each type of work performed. A supervisor’s license is not required.

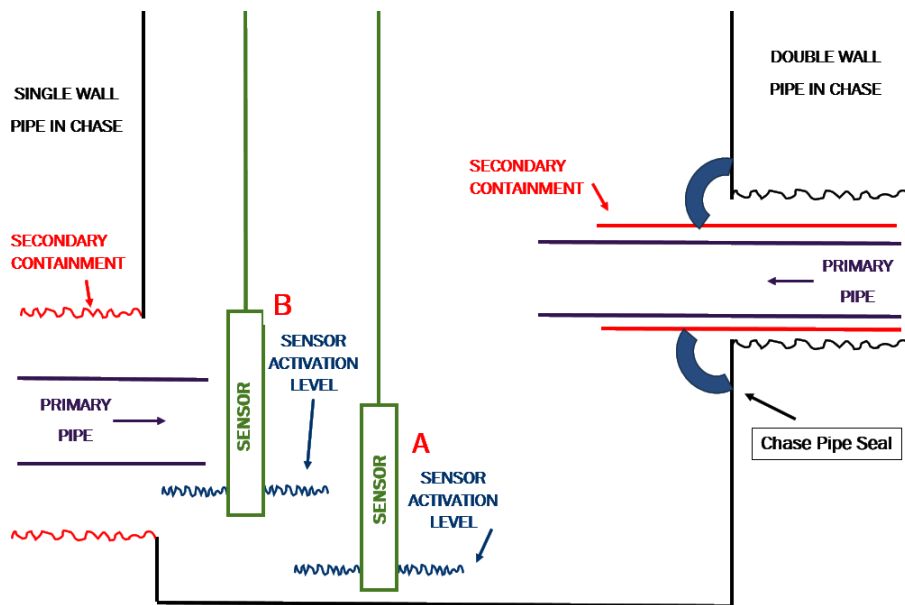
5. Does the hydrostatic test on a newly-installed sump/spill bucket count as the first required tri-annual sump-tightness test?

Answer: Yes, the containment sump and spill bucket will need a tightness test again within three years of the first test at installation.

6. Sealing annular space openings during testing

Is the following situation in compliance with interstitial monitoring piping release detection requirements? Annular space openings of piping in a sump are temporarily sealed to complete a hydrostatic test of the sump. The temporary annular space seal is removed and the annular space is, once again, open to allow potential leaks from the primary piping to flow back into the sump. The piping annular space exists below the activation point of the interstitial monitoring sump sensor.

Answer: No, if the sump sensor activation point is above the level of the penetration seal or cover that is removed after the test then the method would not be considered to be in compliance. Describing specific sump testing circumstances is difficult because of the unique configurations of sumps, piping and penetrations at individual sites. See the diagram below for examples of sump conditions intended to illustrate the answer above.



In all cases, the secondary containment (annular space) of the double-wall piping must communicate with the monitored containment sump during operation. On the right-hand side of the diagram, the chase pipe of the double-wall pipe can be sealed off from the sump when tested and during normal operation. On the left-hand side of the diagram, the chase pipe of the single wall pipe functions as the secondary containment, and must remain open during normal operation and must also remain open during testing if the sump is monitored by a sensor at or above the level of the penetration (sensor example B). This means the chase pipe, which is acting as the secondary containment, must be included in the tightness test of the sump. If the sump is monitored by a sensor below the secondary containment penetration (example A), then the penetration cover can be in place during the test and must be removed during operation.

Please note, not all chase pipes have third party approval and compatibility ratings to act as secondary containment. Facility owners should consult the manufacturer of the chase pipe to confirm chase piping is appropriate as secondary containment.

7. Will the UST program require submittal of records of disposal for water used for hydrostatic testing?

Answer: No, even though typical sump and spill bucket test documentation forms (e.g. the [PEI test form](#)) do include a place to indicate proper management of test water.

8. If a person keeps hydrostatic sumps and/or spill bucket testing water on-site, do they need to register with DEQ as a hazardous waste generator?

Answer: Typically no. If reusing test water as test water, then it is not a waste and can be stored on-site in a labelled, closed container that is compatible with the test water. If the person intends to dispose of the test water, then it is a solid waste and must be properly characterized, transported and disposed of. A person intending to dispose of test water should contact [DEQ's Hazardous Waste Program](#) at the nearest regional office.

9. Can spill bucket and sump test water be disposed of in a sewer or oil-water separator?

Answer: Disposing of test water into an oil-water separator that discharges into a storm drain is not allowed under any circumstances. If the separator discharges into a sanitary sewer, you will need to contact the sanitary system operator to gain approval for disposal of the test water. The best method of test water disposal is to contact a company that can transport and dispose of the contaminated water appropriately. Oil-water separators do not remove dissolved contaminants in water; they simply separate floating/non-aqueous material from water. The [EPA Technical Compendium](#) provides additional information on test water management and disposal regulations.

10. What are the requirements for conducting low-level sump testing?

Answer: Sump tightness testing is required triennially at any site that uses interstitial monitoring. There are two types of sump testing currently approved: full sump testing (as per PEI) and low-level sump testing. In June 2018, EPA published guidance that specifies the requirements for conducting low-level sump testing, as well as a form that can be used to document that testing. Oregon has adopted EPA guidance which can be found here, "[Low Liquid Level UST Containment Sump Testing Procedures.](#)"

11. In a low-level sump test, what is the required depth of liquid?

Answer: The EPA guidance "[Low Liquid Level UST Containment Sump Testing Procedures.](#)" states that, "a minimum of 4 inches of liquid must be used above the lowest activation level of the sensor."

12. Is an audible/visual alarm necessary when performing low-level sump testing as part of the interstitial monitoring piping leak detection method?

Answer: The EPA guidance "[Low Liquid Level UST Containment Sump Testing Procedures.](#)" states "you may only use these instructions if your sensors are programmed to both alarm and shut off when in contact with any liquid." This means that 'stand-alone' sensors (e.g., Franklin

DC 400 series sensors) can only be used if they provide some sort of alarm in addition to the shutdown action. This is true regardless of whether the site is attended or unattended when low-level sump testing is used. DEQ also recognizes that some sites have previously been told they were in compliance with stand-alone sump sensors. However, those approvals were prior to the federal and state rule revision and the new low-level sump-testing requirement published by the EPA.

13. What are the licensing requirements for performing sump or spill bucket testing?

Answer: Post-installation sump or spill bucket testing must be performed by **either** a DEQ-licensed UST Installation Supervisor (ICC -U1) **or** a DEQ-licensed Tank Tightness Test Supervisor (ICC -U3) working under a UST service provider license. Note: Only a DEQ-licensed UST Installation Supervisor working under a DEQ UST service provider license may perform testing during installation activities.

14. If a facility has sensors in sumps, but is not required to use interstitial monitoring (e.g. piping installed prior to March 10, 2008), are the sumps required to be tightness tested every three years?

Answer: Tightness testing of sumps is only required if interstitial monitoring is the method of leak detection being used. If interstitial monitoring is not the primary leak detection method used, then sumps are not required to be tightness tested. Additionally, if sump sensors are installed at a UST system and are not part of the UST's primary release detection (interstitial monitoring) then they also do not require testing.

15. If new piping is installed in pre-existing containment sumps, then do the existing sumps need to be tightness tested and monitored?

Answer: Yes, newly-installed piping is required to utilize interstitial monitoring as the primary leak detection method, which includes tightness testing and monitoring of all containment sumps.

16. Is the annular space of a double walled fuel line (secondary containment) required to be tested on a triennial basis along with containment sumps?

Answer: No. Neither federal nor Oregon regulations require testing of the annular space of fuel lines. Containment sumps used for interstitial monitoring are required to be tested at least once every three years ([OAR 340-150-0310\(8\)](#)).

17. If a tightness test of a sump fails, is it considered a suspected release that requires reporting to DEQ (OAR 340-150-0500 and OAR 340-150-0510)?

Answer: If the sump is being used in conjunction with interstitial monitoring, then the sump tightness testing is part of a release detection method, and a test failure is considered a suspected release under [340-150-0500\(1\)\(d\)](#). That said, a test failure does not need to be reported to DEQ if there was no release of fuel from the UST system and a repair of the sump is completed within 24 hours. In all other cases, a failed sump test or other leak detection alarm must be reported to DEQ within 24 hours.

18. If a tightness test of a sump fails, what investigation needs to be done?

Answer: When a sump (turbine, UDC, transition) being used for interstitial monitoring fails a sump test and cannot be repaired within 24 hours, an investigation needs to be completed within 7 days (or longer, if DEQ allows.) The investigation should include;

- A. A line tightness test of all lines associated with the sump that failed;
- B. Submittal of photographs/diagrams of failed sump; and
- C. Submittal of the [Failed Sump Test Suspected Release Investigation Questionnaire Report \(Appendix A\)](#).

The submittal of A, B, and C will allow DEQ to determine if any further investigation is required.

Spill Prevention Equipment Testing

19. Do spill buckets require tightness testing every three years?

Answer: Yes, unless both walls are monitored by either liquid or vacuum every 30 days.

20. Are repairs for spill buckets (inserts) allowed and is there a specific fluid volume capacity?

Answer: Failed or damaged spill buckets can be repaired, as long as the repair method conforms to a nationally recognized standard or manufacturer-recommended practice and utilizes compatible materials. (November 2020) DEQ recognizes [NLPA/KWA Standard 823](#) as a standard available for spill bucket repair. Neither federal nor Oregon rules specify a minimum volume capacity. For more information about spill buckets, we suggest EPA's brochure, "[Spill Buckets: Best Practices for Your Underground Storage Tank](#)"

21. For sump and spill bucket repairs and replacements, what is the timeline/deadline of repair which DEQ will allow?

Answer: Operating a UST system without properly maintained spill prevention equipment is a violation. DEQ will typically not cite this as a violation if repairs to the spill prevention equipment are completed within 30 days. Replacing the spill prevention equipment would be considered a repair if the equipment is not functioning properly, otherwise the replacement would be a modification under [OAR 340-150-0352](#).

22. Will a visually damaged spill bucket require soil samples to be taken and evaluated?

Answer: Spill buckets that are visually inspected and found to be damaged must be repaired or replaced. Typically, damage to a spill bucket will not require soil sampling unless there is an indication of a release of fuel such as petroleum stained soil or a sheen on water.

23. What are the requirements for spill buckets for remote fills?

Answer: All spill buckets must be tested for tightness every three years (unless both walls are monitored by either liquid or vacuum every 30 days.) For certain remote fill setups that employ an actual bucket, the bucket must still be tested.

Overfill Equipment Inspections

24. Is an owner or permittee required to remove a ball float vent valve if a drop tube flapper or other overfill device is the primary overfill means?

Answer: No, unless the ball float valve interferes with the proper operation of any other overfill prevention equipment or is found to be installed such that it will not restrict flow at 95 percent capacity, the ball float valve is not required to be removed. An owner should consult with a UST service provider to ensure ball float vent valves do not interfere with the proper operation of other overfill prevention equipment. Flow restrictors such as ball float vent valves are prohibited at new UST installations and cannot be repaired or replaced ([340-150-0310\(4\)](#)).

25. Is a UST system originally installed with a ball float as an overfill device still able to use the ball float valve as an overfill device if it is tested every three years, according to OAR 340-150-0310(9)?

Answer: Yes, however, DEQ recommends removal of ball float vent valves. If the ball float valve fails to function properly (it must stop flow at 95%), it must be removed and another overfill prevention device installed.

26. If a high level audible alarm and/or drop tube flapper valve are used as an overfill device and tested every three years according to OAR 340-150-0310(9), do UST systems still containing a ball float vent valve need to test the ball float valve every three years?

Answer: (November 2020) Only the method of overfill prevention being used to meet the UST rules must meet the overfill prevention inspection requirement in [OAR 340-150-0310\(9\)](#). Owners and operators must ensure any secondary overfill methods they use do not interfere with the primary method they use to meet the overfill prevention requirement. You should not use an automatic shutoff device if the UST receives pressurized deliveries. Ball float overfill devices cannot be used with coaxial drop tubes.

Release Detection Equipment Operability Testing

27. Does piping require annual testing?

Answer: Pressurized piping that does not utilize interstitial monitoring leak detection is required to have annual precision (0.1gph) testing or monthly (0.2gph) testing. Unsafe suction piping that does not utilize interstitial monitoring leak detection is required to have precision (0.1gph) testing conducted once every three years. Safe suction piping is not required to have precision testing conducted, and any piping system that utilizes interstitial monitoring is not required to have precision testing conducted so long as the interstitial monitoring is being properly completed and an automatic line leak detector is installed and functionally tested annually.

28. If a high product or max product alarm is documented, is this considered a suspected release?

Answer: The terms “high product” and “max product” alarms are specific to Veeder-Root tank monitors. Typically, a high product alarm is set at 95 percent and max product alarm is set at the full volume setting for the tank. Because exposing the fittings at the top of the tank to fuel during deliveries can lead to a release of fuel through any of the various tank top fittings, a max product alarm or other full volume alarms is an unusual operating condition under [OAR 340-150-0500\(1\)\(b\)](#) and a suspected release. This alarm must be reported to DEQ within 24 hours unless the tank monitor is immediately tested and found to be defective but not leaking and the cause is immediately repaired. If those actions cannot be taken, then the alarm must be reported to DEQ and DEQ may request pressure-decay testing or other site assessment sampling.

29. If a facility installs OPW-flex works equipment, including the setup shown in Figure 1.0, then what are the monitoring requirements in regards to interstitial piping leak detection?

Answer: The UDC in this situation is considered secondary containment. For sites using interstitial monitoring as the primary leak detection method for piping, the UDC sump must have a sensor installed and be monitored by the method outlined in [OAR 340-150-0465](#), and tightness tested at least every three years as outlined in [OAR 340-150-0310](#).

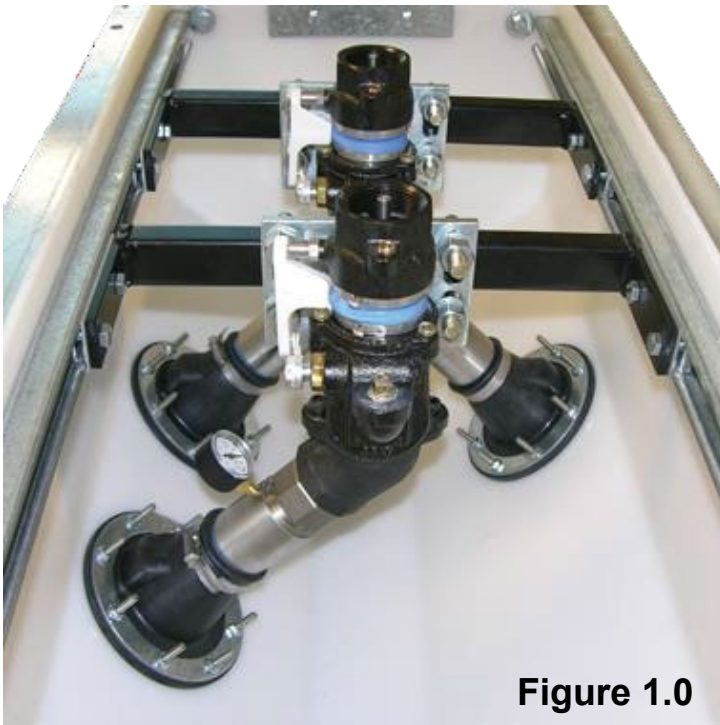


Figure 1.0

30. Do line tightness tests records need to be available for three years?

Answer: (November 2020) No, an owner and permittee must retain, at a minimum, the most recent completed line test, whether that was an annual or triennial test per [OAR 340-150-0410\(8\)](#). However, line leak detector test records will need to be kept for as long as the equipment is in use in accordance with [OAR 340-150-0400\(5\)](#).

31. Does DEQ require that all alarms remain undeleted from an ATG alarm history in order to verify sensors/probes have been tested?

Answer: The facility owner/operator must be able to provide verification to DEQ upon request that functional testing of leak detection equipment (sensors/probes), spill containment and overfill prevention equipment has been completed as required. ATG alarm history records can be used to verify that certain types of functional testing has been performed. UST service provider reports are a more common means of documenting that all components are tested and functional.

32. If a line tightness test fails, is it a suspected release condition?

Answer: Yes, [OAR 340-150-0410\(9\)](#) requires failed line tightness tests to be reported as a suspected release with the associated requirement for immediate investigation.

33. If an ALLD is not installed on the turbine head-works (for example some older turbine models) what is required to make sure the piping is in compliance with Oregon leak detection requirements?

Answer: Per [OAR 340-150-0400](#), UST systems must provide a method of release detection that can detect a release from **any** portion of the UST and underground piping that routinely contains a regulated substance. Piping in a tank top sump is considered underground piping. All portions of pressurized piping must have 3gph leak detection. Past installation practices have left some UST systems with mechanical leak detectors installed downstream of the turbine pump and other pipe sections and fittings/couplings. This set-up leaves those upstream portions of pressurized piping without 3 gph leak detection.

To ensure all portions of pressurized piping has 3 gph leak detection the owner could:

1. Option 1: Install a leak detector on the turbine head;
2. Option 2: Install an electronic leak detector anywhere on the pressurized piping;
3. Option 3: If options 1 and 2 cannot be implemented the DEQ may allow owners to use a combination of an automatic leak detector **and** interstitial monitoring. For this option, the automatic leak detector must be installed in the tank top sump; the tank top must be hydrostatically tested before use; a positive shutoff sensor must be connected to the turbine for facilities without attendants, or an alarm only functioning sensor for facilities with attendants on-site during operation hours; the sensors must be installed at the lowest point of the tank top sump; and monthly interstitial monitoring per [OAR 340-150-0465](#) must be conducted. Prior to implementing this option, contact DEQ.

Note: Please refer to Section 7 of the Oregon Department of Environmental Quality's [Underground Storage Tank Compliance Program 2018 Rule Changes & Other Related Guidance Directive](#) for more information on automatic line leak detection.

34. Why are these ALLD setups currently a violation when these facilities have been in compliance during previous inspections?

Answer: Although DEQ strives to accurately observe and record the compliance status of each UST component during an inspection, previous passing compliance determinations do not

guarantee that the UST system is in compliance. Ultimately, it is the permittee's responsibility to ensure that the UST system is installed and operated in compliance with applicable regulations. In most cases, there may be several options for compliance which should be determined by consultation with a licensed UST Service Provider and the equipment's manufacturer. Supplemental information is also available from other sources such as the EPA and the National Work Group on Leak Detection Evaluations.

35. What records of functional equipment testing (spill prevention, overfill prevention, release detection) are required?

An owner is ultimately responsible for keeping testing records necessary to demonstrate compliance with various testing requirements. All of the testing records must demonstrate that the equipment used functions per manufacturer's specifications.

Walkthrough Inspections

36. Do mandatory monthly UST systems walkthrough inspections require a specific form be used?

Answer: DEQ does not have a state-specific, required form to document monthly walkthrough inspections, but we do have a sample form available on our website at <https://www.oregon.gov/deq/tanks/Documents/tanksWalkInspFormF.pdf>. An owner or service provider may use any documentation necessary to comply with the monthly inspections record-keeping requirement, as long as the form contains all information required in [OAR 340-150-0315](#) and is kept on site or made available to DEQ upon request. Forms from other states or the Petroleum Equipment Institute form ([PEI 900](#)) may also be used in Oregon.

37. Who is required to perform the monthly walkthrough inspection as described in 340-150-0315?

Answer: If conducting monthly walkthrough inspections per [OAR 340-150-0315\(a\)](#), then anyone can perform the inspection, including facility employees or outside contractors. The person or people conducting the inspection should fully understand the system being inspected and must document the inspection on an appropriate form. Oregon recommends that a Class A or Class B operator be assigned this duty.

General Q & As

38. Do equipment repairs require notifying DEQ?

Answer: No. Repair means "restoring to proper operating condition a tank, pipe, spill prevention equipment, overfill prevention equipment, corrosion protection equipment, release detection equipment, or other UST system component, that has caused a release of a regulated substance from the UST system or has failed to function properly." Repairing a UST system does not require notifying DEQ.

39. Can a facility with a broken/failed spill bucket still receive deliveries until a replacement or repair can be made?

Answer: Yes. Oregon DEQ does not prohibit fuel deliveries to UST systems that have a damaged spill bucket or a spill bucket that has failed a tightness test. However, owners and permittees should know that operating a UST system without a properly maintained and operating spill bucket constitutes a violation and a repair or replacement must be accomplished immediately. Most importantly, accepting fuel deliveries with a leaky spill bucket could result in a release of fuel and contamination of soil and/or groundwater.

40. Are repairs for spill buckets (inserts) allowed and is there a specific fluid volume capacity?

Answer: Failed or damaged spill buckets can be repaired, as long as the repair method conforms to a nationally recognized standard or manufacturer-recommended practice and utilizes compatible materials. Neither federal nor Oregon UST rules specify a minimum volume capacity. (November 2020) DEQ recognizes [NLPA/KWA Standard 823](#) as a standard available for spill bucket repair.

41. Do sump sensors (interstitial monitoring for piping) have to shut down turbines?

Answer: EPA guidance specifies that sump sensors must respond to liquid by shutting down all associated turbines and thus preventing a larger leak **if the site is unattended at any time** (e.g., cardlock facilities). If the site is attended at all times, then the sump sensor is allowed to shut down a dispenser, instead of a turbine.

42. If a service provider notices an equipment failure (e.g., damaged sump, piping or failed tightness test), is there an obligation to report a suspected release?

Answer: Most reporting requirements are the responsibility of UST system permittees/owners. However, Oregon’s UST Service Provider/Supervisor rules ([340-160-0020](#)) requires a service provider to report within 72 hours “... any condition relating to a UST System that has or may result in a release to the environment ...” Such conditions would not typically include repair/replacement work activities, but would include observation of accumulating fuel in containment sumps and failed primary line tightness testing. A failed spill bucket or a containment sump tightness test does not obligate a licensed service provider to submit a report to DEQ, unless there is evidence that a release of fuel may have occurred, such as fuel present in the sump.

43. Is it required to shut down all grades of product running through a dispenser when a stand-alone sensor (ex. DC404) detects liquid in a UDC?

Answer: The only time you are required to shut down your turbine, based on a sensor status from the UDC, is during low-level sump testing. EPA guidance specifies that sump sensors must respond to liquid by shutting down all associated turbines and thus preventing a larger leak **if the site is unattended at any time** (e.g., cardlock facilities). If the site is attended at all times, then the sump sensor is allowed to shut down a dispenser, instead of a turbine.

44. Are service providers required to keep records of service performed, or does the responsibility fall solely on the facility permittee/owner?

Answer: Records are required to be kept by the owner or permittee on-site or made available by the owner or permittee for review by DEQ upon request.

45. Does DEQ expect to return to the 3-year inspection cycle and is it possible that a facility is inspected at lesser intervals?

Answer: Yes, as part of the grant received by DEQ from the EPA, DEQ must inspect each regulated UST facility at least every three years. A facility may be inspected at more frequent intervals.

46. If only a dispenser is swapped and all work is being done aboveground, is a facility required to add under dispenser containment?

Answer: Yes, under dispenser containment is required for any new, moved or modified dispenser. “Swapping” or replacement of a new dispenser would require installation of an under containment sump if an under dispenser containment sump does not already exist. Note that if no piping is modified as part of the new dispenser and sump installation, then interstitial monitoring and associated sump tightness testing and sensor would not be required.

47. Is the emergency stop button tested during a DEQ compliance inspection?

Answer: No. Although, emergency stop buttons are an essential component of the safe operation of a UST systems, this component is required by other regulatory bodies.

48. Does the DEQ have “shut down” authority? Besides fines and civil suits, can the DEQ require a business to shut down?

Answer: While DEQ does not have the ability to immediately shut down a facility, DEQ can revoke a permittee’s operating certificate, resulting in the inability to receive fuel deliveries.

49. Is there a timeline in which single-walled steel tanks are to be decommissioned as has been required by certain other states?

Answer: No. There is currently no requirement to decommission single-wall steel tanks in Oregon.

50. If a site uses multiple leak detection methods or multiple over-fill devices is it required that each of these devices are functional (does the redundant method require testing)?

Answer: If a facility has multiple overfill devices, only one must be tested every three years and verified to be properly installed, operational, and not interfere with any other overfill devices. For release detection methods, per [OAR 340-150-0400\(3\)](#), the permittee must select its primary release detection method and the components for that method must be tested for functionality on an annual basis. Only this selected release detection method is required to be tested annually.

51. Is a tank storing fuel containing greater than 10% ethanol (E10) or 20% biodiesel (B20) required to demonstrate compatibility? If yes, are there specific criteria for determining the compatibility?

Answer: Yes. Both federal and Oregon’s rules have always required demonstrating compatibility for any regulated substance stored in a UST. Most recently, the rules have specifically identified demonstrating compatibility for regulated substances containing greater than 10% ethanol or 20% biodiesel. See [OAR 340-150-0135](#) and [OAR 340-150-0160](#).

Three options for meeting the compatibility requirements are described in the rule:

- A certification from a nationally recognized testing laboratory (for example, UL); or
- Specific written approval by the equipment manufacturer; or
- Another option determined by DEQ to be as protective of human health and the environment.

Informational notes:

- The compatibility requirements apply to any UST system component – not just tanks.
- Pre-1981 manufactured single wall fiberglass tanks are not approved for fuel storage with any concentration of ethanol.

Registering new tanks and changing contents to store fuels greater than 10% ethanol or 20% biodiesel requires submittal of the “[To Operate Regulated USTs Containing Alternative Fuel](#)” checklist.

52. If a double-walled tank has a vacuum gauge, is the owner required to test the vacuum gauge?

Answer: Maybe. If a UST system utilizes interstitial monitoring as a monthly tank leak detection method, then the owner must be able to demonstrate that any of the interstitial monitoring leak detection equipment is installed and operated in accordance with manufacturer specifications and a national code of practice (for example, [PEI RP-1200](#)). The revised Federal UST rule and Oregon’s 2018 rule do not require triennial integrity testing of tank annular spaces. However, pressure/vacuum gauges and annular sensors must be functionally tested as per [OAR 340-150-0400\(2\)](#).

53. Can a tank be installed within a tank as a means to make it double-walled?

Answer: Yes, but all equipment must be listed for its intended purpose by a recognized, third-party laboratory and must be fully compatible with the substance stored. More information is available on our website in the fact sheet [Structural Retrofit Requirements for UST Systems](#).

54. Does replacement or repair of shear valve or components above the shear valve, require a precision tightness test after the work is completed per OAR 340-150-0350 (5)?

Answer: No. A repair, as defined in DEQ’s UST regulations, means restoring to proper operation a component of a UST system. Since a shear valves or components above the shear valve are not UST components (i.e., beneath the ground surface), the repair would not require a tightness test. That said, a precision tightness testing after such work is completed is recommended by DEQ.

55. Are pipe and fittings in a sump considered underground?

Answer: Yes. Per [OAR 340-150-0010\(17\)](#) connected piping includes all piping which is beneath the ground surface. It does not limit connected piping to that which is in contact with earthen materials.

56. What is the compliance date for the new 2018 rules? Does it begin on or before October 2020?

Answer: Owners and permittees must be in compliance with all new requirements included in the 2018 revisions to Oregon’s UST rules by Oct. 1, 2020. For example, all spill buckets must be tightness-tested and all containment sumps used for interstitial monitoring must be tested prior to Oct. 1, 2020. This date excludes some reporting, administrative and compatibility requirements for alternative fuels which became effective on June 1, 2018, at the time the new rules became effective.

57. Will owners be receiving documentation about the rule changes effective on Oct. 1, 2020?

Answer: Yes. DEQ has and will continue to provide information to permittees and owners on the rule changes. For example, an abbreviated implementation/tank fee increase outline was mailed in January 2019 to permittees with the annual compliance fee invoice. This outline includes a review of deadlines for compliance with various new testing requirements. DEQ published [a directive on the 2018 UST rule changes](#) that can be used by facility owners and service providers.

Service providers and UST owners participated in several Service Provider Roundtable Q&A sessions with DEQ. The intention of the meetings were to address questions and concerns from the regulated community about the rule changes. The meeting notes are on DEQ Tank’s web page under the Service Provider Roundtable Meetings tab.

During inspections, DEQ has and will continue to educate permittees and owners about upcoming implementation deadlines and requirements.

58. Are there different testing requirements in those counties in Oregon where a customer can pump his/her fuel?

Answer: No, with the exception that facilities proposing to use low-level sump testing that also allow unattended fueling must install automatic line leak detectors that provide audible/visual alarm and positive shut down of the turbine pump. Additional information available in the EPA document titled, “[Low Liquid Level UST Containment Sump Testing Procedures](#)”

59. Does the department require notification for replacement of shear valve?

Answer: See the answer to question 37 (Do equipment repairs require notification) above. Similarly, replacement of a shear valve is not considered a UST system modification and thus, notification is not required.

60. How much fuel in a containment sump constitutes a suspected release?

Answer: The suspected release rule referenced above in Question 4 simply states that “free product” in a “secondary containment” area constitutes a suspected release. DEQ inspectors interpret this to mean that there must be more than just a sheen on water in a sump. There must

be a 'recoverable' amount of fuel. For example, if the accumulation of fuel in the containment sump is enough to soak into an absorbent pad then the incident should be reported as a suspected release. Facility operators and UST contractors must use reasonable judgement in making this determination. When in doubt, please contact the regional inspector to consult.

61. Is pulling out existing flexible plastic piping and pulling new flexible plastic piping a repair, replacement, modification or something else?

Answer: This type of work is occurring more and more frequently as the older Total Containment and Environ thermoplastic piping ages and degrades or even fails. In short, this type of work is considered replacement and a modification. Both 30 and 3-day notifications are required and the "replaced" piping triggers both the interstitial monitoring and site assessment requirements.

62. When do discovered tanks need to be reported and are Service Provider and Supervisor licenses required to complete decommissioning of discovered tanks?

Answer: Reporting/notification, permitting, decommissioning and any other regulatory requirements for discovered tanks depend on important specifics of the discovered tank. Not all underground petroleum storage tanks fall under State and Federal UST regulations. For example, discovered underground tanks used as heating oil tanks are exempt from the requirements of a UST system ([OAR 340-150-0008](#)). Heating oil tanks are subject to [a separate set of DEQ rules](#). UST regulations are also not applicable to discovered tanks that are known to have been empty since at least 1974 ([OAR 340-150-0006](#)). In many instances it is not known when a discovered tank last held fuel or even what type of fuel it held or what it was used for. ***DEQ encourages prompt reporting to a regional UST inspector when any underground tank is discovered so that circumstances can be evaluated and appropriate compliance actions can be taken.***

Reporting/notification, permitting and decommissioning of discovered tanks is no different than for previously registered tanks. However, discovery of tanks that are unregistered typically occurs during construction projects and 30 & 3-day notices are not reasonably expected. It is DEQ's intent to facilitate the removal of discovered tanks and the continuation of construction projects. As noted above, prompt reporting and review with UST staff is the best way to ensure project work is able to continue smoothly. A DEQ licensed decommissioning supervisor is required to oversee the discovered tank decommissioning and site assessment work. DEQ inspectors may approve shortened decommissioning schedules without citing violation(s). When necessary, inspectors may issue the 3-day approval and ask the contractor to leave the excavation open for an inspection by DEQ staff at an available time. ***In all cases, it is important for UST Service Providers/Supervisors to ensure proper site assessment sampling is completed before backfill of excavation.***

63. Can facility owners replace thermoplastic piping without sump testing, site assessment sampling, new sump sensors and daily interstitial leak detection requirements?

Answer: This is a very important question that has been asked more and more frequently as the old Total Containment and Environ plastic piping ages and fails. Installation of new tanks and/or piping triggers the requirement for double-wall equipment and use of interstitial monitoring, as

per [OAR 340-150-0135\(12\)](#). DEQ will not approve an exemption or deferral from these requirements. Containment sump tightness testing is required in order to demonstrate interstitial monitoring can be properly performed. It is also required by most codes, standard practices and manufacturers at the time of installation. In addition, site assessment sampling may be required depending on the nature of the piping replacement work. Generally, site assessment sampling will be required anytime a containment sump has failed a tightness test or fuel is suspected to have been released from the UST system. DEQ recognizes that the double-wall and interstitial monitoring requirements may inhibit some facility owners from proactively replacing older thermoplastic piping (Environ/Total Containment) or other piping manufactured and approved under the pre-2005 UL 971 standards. However, once such piping begins to show signs of degradation, facility owners and Service Providers would be well served to take prompt action to replace the piping before the piping fails and causes a costly release of fuel. The effort and expense of changing to interstitial monitoring will be much less than the cost of conducting environmental assessment and potential loss of property value due to petroleum contamination.

64. Why and when is hydrostatic sump testing required?

Answer: Currently, hydrostatic sump testing is generally required under two different situations; 1) suspected release investigation (for example, fuel discovered in containment sump); and, 2) anytime interstitial monitoring is used as a leak detection method. When fuel is discovered in a containment sump for any reason, a hydrostatic test is required to determine if the fuel has been contained or possibly released into the environment. If a sump test fails or cannot be properly performed for some reason, then site assessment sampling is required.

Hydrostatic sump testing is also required when interstitial monitoring is to be used in order to demonstrate fuel will be fully contained and detected by a sump sensor. Petroleum Equipment Institute recommended practice ([PEI/RP 1200](#)) describes the most commonly used hydrostatic sump testing method and provides a form for recording the test results.

65. When replacement of thermoplastic piping (for example, Environ and Total Containment) is being performed is it necessary to perform hydrostatic tightness testing of containment sumps both *before* the old piping is removed and *after* the new piping is installed?

Answer: Hydrostatic testing of containment sumps before piping is removed and replaced is not specifically called for in Oregon's UST rules. Containment sump testing before flexible plastic piping is pulled out of a chase for replacement is recommended by DEQ inspectors in order to demonstrate that the sump was or was not liquid tight before the piping replacement work began and may be part of a suspected release investigation. Containment sump testing after new piping has been installed is always going to be required, because installation of new piping requires the use of interstitial monitoring as a leak detection method.

66. What defines piping replacement vs. piping repair?

Answer: Although Oregon's UST rules do include specific definitions for repair and replacement, there is still some uncertainty about how these definitions and the rules that use these terms translate to specific situations at UST facilities. Most importantly, how are these terms interpreted to apply to situations where flexible piping (Total Containment, Environ, etc.) is pulled out of the chase pipe and "replaced" by pulling in new flexible piping? This type of work is considered a "replacement" of piping and triggers the site assessment requirements of

[340-150-0180](#) and the interstitial monitoring requirements of 340-150-0300 (see questions 7 and 8 above). The definition of repair only applies to situations where some portion of a UST system has failed. One example of a repair as relates to piping, is the situation where a flexible pipe or fitting has failed at the tank top sump. In some cases, the piping can be cut and re-fit with a new fitting and re-attached. Such work is considered a repair and must be completed according to manufacturer recommended practices or a nationally recognized industry standard.

67. Is there an on-line option for facility owners to complete the required Class A/B UST System Operator Training?

Answer: Yes, currently there is one training vendor with on-line Class A/B operator training. Please see the [list of Oregon DEQ approved A/B training vendors](#).