

Preparing for an UST Compliance Inspection

**Guidance for Underground Storage Tank
Facility Owners and Permittees**

July 2013



State of Oregon
Department of
Environmental
Quality



**Do You Need a Copy of the UST Regulations -
OAR Chapter 340, Division 150?**

Download a copy from our Webpage at:

<http://www.deq.state.or.us/lq/tanks/ust/index.htm>

or

Call DEQ at:

1-800-742-7878 toll free in Oregon (message line)

or

503 229-6652

Important Note:

DEQ will review financial responsibility records at the time of field inspections. The following publications from the U.S. Environmental Protection Agency (EPA) may be helpful:

*Dollars and Sense
List of Known Insurance Providers for UST Owners and Operators*

<http://www.epa.gov/swerust1/pubs/index.htm>

Do You Have Comments or Suggestions for Improving this Guidance?

Send comments and suggested changes to:

tanksinfo@deq.state.or.us

or

Oregon Department of Environmental Quality
UST Program Policy Coordinator
811 SW Sixth Ave.
Portland, OR 97204

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General Discussion

Purpose

The purpose of this guidance is to help underground storage tank owners and permittees prepare for a compliance inspection by Oregon Department of Environmental Quality staff. Using this guidance will not only prepare you for an inspection but will also help ensure that your facility remains in compliance with UST requirements at all times.

Field citation fines

Inspections should be taken very seriously. DEQ inspectors have the authority to issue field citations totaling \$1,500 for violation of UST regulations. If DEQ discovers certain serious violations during the inspection, you could receive civil penalties which may end up costing you thousands of dollars.

General information

The UST regulations are part of Oregon Administrative Rule Chapter 340, Division 150. Oregon has adopted federal Environmental Protection Agency regulations (40 CFR Part 280) with some modifications. The permittee is the person responsible for the day-to-day operation of an underground storage tank system. DEQ issues an UST General Permit Registration Certificate to a facility's permittee.

The permittee is responsible for complying with all state and federal rules and requirements associated with the installation, operation, maintenance and repair of an UST system. This is an important responsibility, as this work will help prevent leaks that can contaminate soil and groundwater. Seventy percent of Oregon's citizens rely on groundwater as a primary or secondary source of drinking water. Failure to properly operate and maintain UST system equipment can result in the contamination of drinking water and the loss of a significant financial investment for both adjacent property owners and your own facility.

What to expect during the inspection

You'll be asked to provide copies of records pertaining to release detection for tanks and piping, testing of any and all devices as required by state rules, repairs and maintenance activities, and an as-built drawing of the UST system. If you have any doubt of your ability to meet the requirements of a full compliance inspection, DEQ recommends that you contact a licensed UST service provider or equipment vendor to assist you during the inspection. DEQ expects you to make prior arrangements for any such assistance and to be fully prepared to complete the inspection on the date scheduled.

You'll also be asked to document compliance with financial responsibility requirements in OAR Chapter 340 – Division 151. For those facilities buying UST pollution liability insurance, this means having a copy of the UST Certificate of Insurance form for the inspector's review. For those using self-insurance, it means providing an appropriately worded letter from the company's chief financial officer. And, in a few cases, it means providing a trust agreement, standby trust agreement or copy of a surety bond.

Compliance inspections may take as long as four to six hours at a large facility and will require your uninterrupted attention and assistance for the entire time. DEQ requires access into all UST system hatch covers, manways, sump covers and other entry points. You should have all necessary authorization, keys and tools to provide access as required. **Again, you must be able**

to open any covers or entry points, as part of a demonstration of your ability to operate all components. Advance planning, professional assistance and patience will help expedite the inspection process and avoid situations that may be disruptive to normal business operations.

How to use this guidance

Each UST permittee is expected to be familiar with the UST system components and equipment at their facility as well as Oregon's underground storage tank regulations. With this knowledge, you can review this guide and determine the compliance items that apply to your facility. Compliance items are specific requirements listed in state and federal rules that the DEQ inspector will check. This guide lists specific compliance items for new and existing UST systems, including release detection methods, spill prevention, overfill prevention, corrosion protection, and repairs.

Compliance items are on pages 3 through 8 and labeled A to M. All facilities must provide to DEQ the information listed in items A, B, C, E, F, H, I, J, K, L and M of this document. Depending on the type of release detection method(s) in use at your facility, you'll need to complete one or more compliance items in Items G.1 through G.6. DEQ has labeled each compliance item to match the report form that its inspectors use in the field. There is no Item D in this guidance at this time.

Technical assistance

After the inspection (or during, if appropriate), the UST inspector will be happy to answer any technical assistance questions you may have. In addition, each inspector carries copies of a number of guidance documents and regulations that they'll be glad to share with you.

After the inspection

If you pass the inspection without any problems, DEQ will send you a brief letter to document your compliance status at the time of the inspection. Otherwise you'll also be notified if any violations are observed during the inspection and issued a field citation. The field citation will include specific actions that you must perform to correct the violations, a schedule for completing these actions and a monetary fine for violations noted. Once you make these corrections and pay the monetary fine, DEQ will send you a brief letter to document that you're in compliance.



UST compliance items

Review the information or question for each compliance item listed that pertains to your facility. Check the box when you've assembled the required information or understand the requirement and can demonstrate compliance.

Item A – Facility, owner and permittee information

Provide the following information about property ownership, tank ownership and the person responsible for the facility's day-to-day operation.

Name, address, telephone and fax numbers for the:
tank owner, property owner and permittee

Current information is available for all three entities and ready to give to DEQ.

Item B – Underground storage tank information

Provide or verify facility information that includes: UST facility number and operating certificate number. For each tank: permit number (i.e., ABCD); tank ID number; product stored; tank diameter and length; tank volume, installation date and type; and installation date for corrosion protection and lining, if applicable.

Current information is available and ready to give to DEQ.

Item C – Facility layout design

Provide a detailed "as-built" diagram of the entire facility. This must include the location of all UST system components including all USTs, piping, dispensers, spill prevention devices, overflow prevention devices and all elements of any UST or piping corrosion control system.

As-built diagram is available and ready to give to DEQ.

Item D – Reserved for future use

Item E – Spill prevention

- Are spill devices required on all tanks?
- Is the fill pipe fitted with spill containment?
- Is the turbine pump fitted with spill containment?
- Are the dispensers fitted with spill containment?
- Are all the containment devices clean and dry so that a spill can be contained?
- Is there any visual sign of soil impacted by spills? If so, was the release reported to DEQ?

Item F – Overflow prevention

- Are overflow devices required on all tanks?
- Do tanks have fill pipe shutoff devices?
- Do tank vents have ball float valves?
- Do tanks have high level alarms?

Item G – Release detection methods

List the release detection method used at your facility. Find your method for tanks and piping, then refer to the corresponding item (Items G.1 through G.6) for a listing of compliance items for that method.

Method for USTs

- Automatic Tank Gauging - G.1
- Interstitial Monitoring - G.2
- Statistical Inventory Reconciliation - G.3
- Inventory Control & Tank Tightness Test - G.3
- Manual Tank Gauging - G.4
- Manual Tank Gauging & TTT - G.4

Methods for Pressurized Piping

- Interstitial Monitoring - G.2
- Automatic line leak Detector - G.5
- Annual Line Tightness Test - G.5

Methods for Suction Piping

- Interstitial Monitoring - G.2
- Line Tightness Test (every three-year) - G.5
- None Needed - Safe Suction - G.6
- None needed - No underground piping

Item G.1 – Automatic tank gauging

- What's the make and model of the ATG and sensing probe?
- Who installed the ATG and sensing probe?
- Is the ATG manufacturer's information available at site?
- Has the ATG been installed, calibrated and repaired according to manufacturer instructions?
- Has the ATG received third-party verification of device performance? Have documentation available.
- Can the presence of tank probes be verified in each tank?
- Is the ATG control unit connected and operating?
- Is the tank test conducted at the required product volume and time?
- Are 12 months of test records available?
- Has the ATG ever indicated a release? If so, was the release reported to DEQ?

Item G.2 – Interstitial monitoring – tanks and piping

- Is monitoring performed manually or electronically?
- Is monthly monitoring performed?
- Are sensing devices third-party certified?
- Has equipment been installed, operated and maintained according to manufacturer instructions?
- Can the equipment detect a leak from any portion of the UST that contains product?
- Is there a record of monthly monitoring conducted for each of the past 12 months?
- Has the monitoring device ever indicated a release? If so, was the release reported to DEQ?

Item G.3 – Inventory control, tightness testing and statistical inventory reconciliation

NOTE: As of Dec. 22, 2008 inventory control cannot be used as a primary release detection method. As of Dec. 22, 2008, one of the other methods listed herein must be used as the primary release detection method. Inventory control may be used as a secondary or backup method of release detection at the discretion of the permittee and tank owner.

Inventory control

- Are readings recorded each operating day and reconciled monthly?
- Is the correct calibration chart used to determine volume to the nearest 1/8 inch of product depth?

- Are tank inventory readings recorded before and after each delivery?
- Can gauge stick be read to nearest 1/8 inch and measure full height of product in tank?
- Are monthly water readings measured to the nearest 1/8 inch and used in the inventory calculation?
- Does each dispenser have a totalizer with a currently calibrated meter?

Statistical Inventory Reconciliation

- Has the SIR method received third-party approval for tanks? Have documentation available.
- Have two consecutive monthly inconclusive results occurred in the past 12 months? If so, was the release reported to DEQ?

Tightness Test

- Has the tightness test method been third-party approved? Have documentation available.
- Did an Oregon licensed service provider for tightness testing perform the tightness test?
- Has the 10-year exemption from advanced leak detection expired?

All Methods

- Are 12 months of monitoring data available?
- Is the monthly reconciliation calculation performed each month?
- Does the fill pipe drop tube extend to within one foot of the tank bottom?
- Did all tanks pass the last tightness test?
- Has a release or a suspected release ever occurred? If so, was the release reported to DEQ?

Item G.4 – Manual tank gauging

- Do records show that level measurements are taken at start and end of a 36-, 44- or 58-hour period?
- Is product added or removed during the gauging period?
- Are measurements recorded weekly?
- Is the monthly reconciliation calculation performed correctly?
- Is the tank inventory product height at the start and end of the gauging period the average of two stick readings?
- Is the weekly and monthly variation between start and end less than standard for tank size and test period?
- Can gauge stick be read in 1/8 inch increments to full height of tank volume?
- Is manual tank gauge the sole leak detection method for a tank with a volume of greater than 1,000 gallons?
- Is tank gauging and tightness testing the sole method for a tank greater than a 2,000-gallon tank?
- Has the 10-year exemption from advanced leak detection expired?
- Has a tightness test been completed in the past five years?
- Are 12 months of monitoring records available?
- Has a suspected release occurred? If so, was the release reported to DEQ?

Item G.5 – Pressure piping release detection

Automatic line leak detectors

- What is the line leak detector make and model?
- Is the detector connected to an automatic shut-off device?
- Is the detector connected to an automatic flow restrictor?
- Is the detector connected to a continuous audible or visual alarm?
- Did all detectors pass the last annual test?
- Is the detector third-party approved?
- Is the detector installed, operated and maintained according to manufacturer instructions?

- Do any of the detectors indicate a release? If so, was the release reported to DEQ?

Annual line tightness testing

- Is annual line tightness testing required as element of release detection?
- Is a conventional line tightness test performed?
- Is the tightness test third-party approved?
- Was the tightness test performed by an Oregon certified tester?
- Is an electronic tightness test performed?
- Is the electronic line leak detector third-party certified at 0.1 gph?
- Has the electronic device been installed, operated and maintained according to manufacturer instructions?
- Do any of the detectors indicate a release? If so, was the release reported to DEQ?

Daily monitoring in lieu of annual line tightness testing

- Is daily “in pipe” monitoring performed?
- Is daily sump monitoring performed?
- Can monitoring detect a leak in a portion of the piping that contains product?
- Is monitoring equipment third-party certified?
- Has monitoring equipment been installed, operated and maintained according to manufacturer instructions?
- Are results of daily monitoring kept in a written log?
- Are 12 months of daily records available?
- Has the daily monitoring indicated a release? If so, was the release reported to DEQ?

Item G.6 – Safe Suction

- Does the piping system slope to the tank and operate at atmospheric pressure?
- Is only one check valve used?
- Is the check valve located directly under the dispenser?
- How were these requirements verified? Have documentation available.
- Is a monthly monitoring method used?
- Is a line tightness test performed every three years?
- Is the tightness test third-party approved?
- Was the tightness test performed by an Oregon certified tester?
- Has the monitoring indicated a release? If so, was the release reported to DEQ?

Item H – Corrosion protection for steel tanks and piping

Galvanic corrosion protection – tanks and piping

- When was the corrosion protection system installed?
- Has the tank passed the NACE RP-0285 evaluation?
- Has the piping passed the NACE RP-0285 evaluation?
- What was the date of the six-month inspection?
- When is the first three-year inspection due?
- When was the last three-year inspection performed?
- When is the next three-year inspection due?
- Are all corrosion protection tests on file?

Impressed current corrosion protection – tanks and piping

- When was the corrosion protection system installed?
- Is the system connected to power and turned “ON”?
- Is the 60-day inspection log present and current?
- Has the tank passed the NACE RP-0285 evaluation?
- Has the piping passed the NACE RP-0285 evaluation?

- What was the date of the six-month inspection?
- When was the first three-year inspection due?
- What was the date of the last three-year inspection?
- When is the next three-year inspection due?
- Are the results of all corrosion protection tests on file?

Internally lined tanks – no external corrosion protection

- Was an internal inspection completed prior to lining? What method of inspection was used?
- When was the lining installed?
- When is the 10-year inspection due?
- When is the first five-year inspection is due?
- What is the date of the last inspection?
- When is the next inspection due?

Note: Under certain conditions where external corrosion protection is in place, internal lining inspections may not be required. Does your system qualify for this exemption? If you're uncertain, ask the UST Inspector.

Item I – Cathodic protection system testing

Provide the results of all required cathodic protection system tests. Make sure that the test contractor provides a detailed report that includes a diagram with the location of reference electrode(s) used during measurement of soil-to-structure potentials clearly marked.

- Current information is available and ready for DEQ to review.

Item J – Temporary closure

- Are any tanks currently not in use?
- On what date was the use of the tanks discontinued?
- Have any tanks been out of use longer than three months?
- If the tanks have been closed more than three months, has the system been capped and secured as required?
- Is there still product in any tank that's not currently used or is in temporary closure?
- Are all corrosion protection systems operating on closed tanks?
- Are corrosion protection systems operated, maintained and tested as required?
- Are closed tanks with internal lining inspected as required?
- Is leak detection for piping performed as required?
- Has the monitoring indicated a release? If so, was the release reported to DEQ?

- Current information is available and ready for DEQ to review.

Item K – Facility upgrade and repair history

The permittee must notify DEQ before any upgrade work and document work performed. You must also keep records of any repairs made to system components and specifically list significant problems associated with equipment or materials.

- Current information is available and ready for DEQ to review.

Item L – Financial responsibility

The permittee must provide documentation to demonstrate compliance with the financial responsibility requirements. Most frequently this will be a *Certificate of Insurance for Underground Storage Tanks*. Please note that an *ACORD* certificate IS NOT acceptable documentation. Facilities relying on self-insurance must have a specifically worded letter from their chief financial officer.

- Current information is available and ready for DEQ to review.

Item M – UST system operator and emergency response information

The permittee of a facility that dispenses a regulated substance from an UST to a motor vehicle must employ trained personnel who can properly operate and maintain the UST system. The permittee must also provide emergency response information to any person who dispenses a regulated substance from the UST system.

- A current training certificate is available for the designated UST system operator.
- A copy of the emergency response written instructions provided to persons dispensing regulated substances is available for review.
- Emergency response signage is posted in prominent areas that are easily visible to persons dispensing a regulated substance.