

Lessons learned from UST inspections in 2019

The following are some helpful tips and lessons learned from UST compliance inspections performed in Nevada during 2019. This will give UST operators and contractors insight on how compliance inspectors review annual and triennial testing documentation.

Annual Walkthrough Inspections:

Annual walkthrough inspections as outlined in 40 CFR 280.36(a)(1)(ii)(A) must include checking under dispenser containment (UDCs) sumps and submersible turbine pump (STP) sumps for damage, leaks to the containment area, and releases to the environment and subsequently removing any liquid and debris. Similarly, even if a containment sump is not used for interstitial monitoring, an annual check must still be performed. Simply put, all dispensers and sumps must be checked during an annual walkthrough inspection. For more information, please consult the [EPA Underground Storage Tank Technical Compendium](#).

Checking the Right Boxes:

Individuals conducting walkthrough inspections should only check or initial checklist items for activities that were actually performed. If only monthly walkthrough items were inspected, do not check or initial checklist items for the annual walkthrough. Please be aware that compliance inspectors will ask questions about action items of an annual walkthrough to ensure they were completed correctly.

Reviewing and Maintaining Monthly Leak Detection Records:

Monthly leak detection records like continuous statistical leak detection (CSLD) and interstitial monitoring (commonly referred to as a liquid status report) must be physically checked by an operator of the UST system. Submitting a single leak detection history report for 12 months is inadequate and does not meet the intent of reviewing monthly leak detection records by the operator. Inconclusive or failed leak detection results are often overlooked for consecutive months when this happens. We recommend printing these report(s) during the monthly walkthrough inspection and attaching the information to the monthly walkthrough checklist.

Annual Automatic Tank Gauge (ATG) Monitor Certification and Functionality of Release Detection Equipment:

When confirming the functionality of equipment used for leak detection during an annual ATG monitor certification, testers must ensure the sensors and probes are removed (this includes removing sensors from the interstitial space in tanks), checked for damage, and trigger the appropriate alarm or warning on the ATG. This process will include comparing measurements programmed into the ATG. During compliance inspections, inspectors will review the alarm history report on the ATG to confirm if the leak detection equipment was functionally tested on the date the monitor certification was completed. If the information contained within the alarm history report does not correspond to the date of the certification, then the ATG Monitor Certification will not be accepted on the grounds that the functionality of the leak detection equipment was not communicated to the ATG. We recommend printing out both the alarm history report and the system status report and attaching them to the Annual ATG Monitor Certification as outlined in PEI/RP 1200.

Overfill Device Triennial Inspection for High-Level Alarms:

There appears to be some confusion as to what constitutes a high-level alarm for the purposes of overfill protection. By itself, the red alarm and loud noise that is triggered on the ATG inside the building and

away from the fill tube is not considered a high-level alarm overflow protection device. To qualify as a high-level alarm, there must be an unobstructed alarm device installed near the tank fill tubes to alert the fuel deliverer that the tank is 90% full or within 30 minutes of overflowing.

When testing a high-level alarm to satisfy the overflow device triennial inspection, the probe must be removed from the tank and measured to confirm that the floats will activate the ATG alarm when they are raised to the tank's 90-percent fill level. During a compliance inspection, inspectors will review the alarm history report to confirm the overflow alarm was triggered on the date when the overflow device inspection was conducted. We recommend printing out the alarm history report showing the matching dates and attaching this to the overflow device inspection report.

Triennial Testing/Inspections:

When the 2015 Federal UST regulations mandated new triennial testing to be completed by October 2018, many local UST operators delayed testing until after the October implementation date. This was a nationwide trend which created a backlog for new and replacement parts needed to correct the deficiencies noted during these inspections. We recommend conducting your triennial testing/inspections early to avoid the rush and save your organization time and money.

Suggested Resources/Literature Links:

[NDEP UST Website](#)

[NDEP-Resources for Underground Storage Tanks](#)

[List of Nevada Certified Individuals](#)

[EPA-UST Technical Compendium for the 2015 UST Regulations](#)

[EPA-Musts for USTs](#)

[EPA-Release Detection for Underground Storage Tanks and Piping: Straight Talk on Tanks](#)