



POSITION PAPER - UST COMPLIANCE

Date: August 3, 2018

Subject: Low Level Sump Testing to comply with SC UST Control Regulation, R.61-92, Section 280.35(a)(1)(ii)

Regulation background/history: Federal regulation CFR 280.35 and SC UST Control Regulation, R.61-92, Section 280.35(a)(1)(ii) state that containment sumps used for interstitial monitoring of piping must be tested at least once every three years, to ensure the sump is liquid tight. Vacuum, pressure, or liquid testing methods may be utilized to complete the testing, in accordance with Section 280.35(a)(1)(ii).

Discussion: As noted in EPA's technical compendium, EPA is aware that in certain situations, specifically for certain older systems, even testing four inches above the highest penetration fitting, as outlined in Petroleum Equipment Institute's Recommended Practice RP 1200-12, "may create unusual challenges and unintended consequences. These include:

- *It could be difficult to access the sump, requiring the dispenser be removed in order to do the testing.*
- *The challenges and costs of testing above penetration fittings may lead some owners to abandon their interstitial monitoring and move to a different and possibly less protective release detection method.*
- *The increased costs incurred for testing to the higher level may serve as a disincentive for owners to upgrade existing systems to include double-wall piping with interstitial monitoring and containment sumps."*^A

Options: For facilities that are conducting interstitial monitoring of piping, one of the following options may be used to comply with the requirements for testing under Section 280.35(a)(1)(ii):

- A. Requirements developed by the manufacturer (Note: If the manufacturer has not developed requirements, refer to options B or C);
- B. Code of practice developed by a nationally recognized association or independent testing laboratory; or
- C. Requirements determined by the Department to be no less protective of human health and the environment than the requirements listed above in (A) and (B).

The following is an example of a Low Level Sump Testing method the Department determined to be no less protective. It is the same method described in EPA's UST Technical Compendium, amended June 12, 2018:

- A liquid level sensor is mounted at the lowest point in the sump and a periodic test is performed by adding liquid to a point that will ensure activation of the sensor;^B and
- The submersible turbine pump (STP) automatically shuts off when liquid activates the STP sump sensor, or
- The dispenser automatically shuts off when liquid activates the dispenser sump sensor, and the facility is always staffed when the pumps are operational.

A link to an example of testing procedures as well as the sample for documenting the Low Level Sump Testing procedure can be found on the EPA website in the referenced Technical Compendium.^C These testing procedures should be followed if low level testing of the containment sumps is performed. Testing must be documented using the format of the sample form. Prior notification to the Department is not required by SC UST Control Regulation. However, documentation should be provided upon request from the Department.

Per Section 280.20(e), UST systems "must be properly installed in accordance with a code of practice developed by a nationally recognized associated or independent testing laboratory and in accordance with the manufacturer's instructions." Therefore, the Low Level Sump Testing method may not be used during

installation. For UST systems installed after May 26, 2017, the next testing would be due within three years after the standard sump testing completed at installation and may follow the Low Level Sump Testing protocol.

^AText was taken directly from the EPA's "***Underground Storage Tank (UST) Technical Compendium about the 2015 UST Regulations***," "Containment Sump – Alternative Test Procedures," on June 12, 2018.

^B Check with the sensor manufacturer to determine the amount of liquid required to ensure activation of the sensor. Written documentation from the manufacturer detailing the minimum amount of liquid required to activate the sensor must be provided when the implementing agency (Department or SC DHEC) requests it.

^C The following link will take you to the EPA webpage where the sample form and testing procedures for low liquid level UST containment sump testing can be found: <https://www.epa.gov/ust/low-liquid-level-ust-containment-sump-testing-procedures>.