



Session: Low Level Sump Testing

**2018 National Tanks Conference
Louisville, Kentucky**



Summary of 2015 UST Regulatory History/Requirements Regarding Low Level Sump Testing

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Testing Requirements for Containment Sumps (40 CFR 280.35)

Beginning no later than October 13, 2018:

- Test all containment sumps that are used for interstitial monitoring of piping at least once every three years to ensure liquid tight using vacuum, pressure or liquid.



Testing Requirements for Spill Buckets and Containment Sumps (40 CFR 280.35)

Testing done in accordance with:

- Manufacturers requirements.
- Code of practice developed by nationally recognized association or independent testing laboratory
 - PEI RP 1200.
- Requirements determined by the implementing agency to be no less protective of human health and the environment.
 - Alternative “low-level” containment sump testing.



Alternative “Low Level” Containment Sump Testing

- Requirements determined by the implementing agency to be no less protective of human health and the environment.
- 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; and
 - The pump automatically shuts off when liquid activates the sensor, or
 - The dispenser automatically shuts off when liquid activates the sensor, and the facility is always staffed when the pumps are operational.



Low Level Containment Sump Testing Procedures

- These procedures are intended for facilities where EPA is the implementing agency.
 - May also be used as appropriate in states and territories which allow low level hydrostatic testing of containment sumps, but do not already have similar instructions.
 - Owners and operators should check with their implementing agencies.
 - <https://www.epa.gov/sites/production/files/2018-06/documents/low-level-hydrostatic-sump-testing-procedures.pdf>
- EPA also developed a sample form that you may use to document compliance with these procedures.



Low Level Containment Sump Testing Procedures

- Remove any debris or liquid in the containment sump prior to testing. Visually check for cracks, holes, or compromised boots located in the portion of the sump where water will be added during the low liquid sump test.
- Visually inspect sensor/electrical connections for damage or corrosion.
- Perform the sensor activation test according to the sensor manufacturer's instructions for testing. Some manufacturers may specify testing in a container other than in the sump.
- Add water into the sump until the liquid level is at least 4 inches above the height required to activate the sensor. Do not disturb the water in the sump for at least one hour.
- After one hour has elapsed if the level has dropped by more than 1/8 inch, then the sump failed the low liquid level hydrostatic integrity test.



Addressing Testing Failures

- The specific requirements to repair damage to containment sump may vary depending on the requirements of the implementing agency.
- For example, some states may require repair to achieve containment sump tightness up to or above the highest penetration point of the sump so that it meets PEI RP 1200.
- For alternative “Low Level” Containment Sump scenarios, EPA considers repair to achieve containment sump tightness to at least the height where a liquid level sensor will activate.



Additional Information

- OUST Website <https://www.epa.gov/ust>
- 2015 UST Regulations Technical Compendium provides applicability determinations, clarifications, and further guidance about the 2015 underground storage tank regulations. Approximately 50 questions & answers in many categories:
 - Spill buckets, under dispenser containment sumps, containment sumps
 - Secondary containment and interstitial monitoring
 - Overfill protection
 - Walkthrough inspections
 - Release detection
 - Compatibility
 - Airport hydrant systems related to Department of Defense facilities<https://www.epa.gov/ust/underground-storage-tank-ust-technical-compendium-about-2015-ust-regulations>
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