

**Louisiana Department of Environmental Quality**  
**Underground Storage Tank Division**

**UST Containment Sump Integrity Verification Under High Tank Hold Water Level Conditions**

This document provides a procedure for verifying the integrity of a containment sump when high tank hold water levels are present as one method that meets the requirements in LAC 33:XI.511 for periodically testing the integrity of containment sumps that are used for interstitial monitoring of piping.

LAC 33:XI.511 requires that containment sumps used for interstitial monitoring of piping must prevent releases to the environment by meeting one of the following requirements: (1) be double-walled with the integrity of both walls periodically monitored (at least once every 30 days), or (2) be tested at least once every three years to ensure that it is liquid-tight.

When the testing option is selected, containment sumps used for piping interstitial monitoring must be tested at least once every three years to ensure that they are liquid-tight using a vacuum, pressure, or liquid test method according to one of the criteria listed in LAC 33:XI.511.A.1.b.i – iii:

- Requirements developed by the manufacturer (only if the manufacturer has developed requirements);
- Code of practice developed by a nationally recognized association or independent testing laboratory (DEQ accepts the integrity method listed in Petroleum Equipment Institute (PEI) Publication RP1200, *Recommended Practices for the Testing and Verification of Spill, Overfill, Leak Detection and Secondary Containment Equipment at UST Facilities*, available on PEI's website <http://www.pei.org/rp1200>); or
- Requirements developed by DEQ to be no less protective of human health and the environment than the two requirements listed above.

DEQ has determined that the requirements in this document are no less protective of human health and the environment as the first two requirements listed above if all of the conditions in this document are met and all of the procedures in this document are followed. This procedure is allowable to meet the periodic containment sump test requirement in LAC 33:XI.511 and the repaired containment sump test requirement in LAC 33:XI.507.A.5 as long as the required conditions specified in these procedures are met. If the required conditions and procedures are not adhered to, then this integrity verification is not allowed.

These procedures cover:

- Required Conditions
- Pre-Verification Checklist
- Integrity Verification

A form is available at <http://www.deq.louisiana.gov/ust> to document compliance with these procedures. If the DEQ form is not used, the form that is used must document compliance with all of the requirements listed in these procedures.

### **Required Conditions**

The containment sump must meet all of these conditions in order for this test method to be used to comply with the requirements of LAC 33:XI.511.A.1.b.iii:

- Tank hold water level must be above the highest containment sump penetration or sump sidewall seam, whichever is higher, during the sump integrity verification inspection.

To use these procedures, the tank hold water level must be determined. Documentation must be provided to show how the water level was determined and that the water level meets the requirements listed above.

### **Pre-Verification Checklist**

Check the two items listed below before using the following step-by-step instructions to perform the containment sump integrity verification. If no issues are found after checking the two items, proceed with the step-by-step instructions to verify that the sump has integrity. If any issues are found, the verification procedure cannot be used until the issues have been addressed.

Check 1 – Determine the tank hold water level. The tank hold water level must be above the highest containment sump penetration or sump sidewall seam, whichever is highest. If the tank hold water level is below the highest sump penetration or below the sump sidewall seam, whichever is highest, then this sump integrity verification procedure cannot be conducted at this time.

Check 2 – Determine if there is liquid or debris present in the sump. Remove all liquid and debris from the containment sump prior to the sump integrity verification.

### **Integrity Verification Steps**

Step 1 – Dry the interior surface of the containment (e.g., wipe down, air dry, etc.).

Step 2 – Perform a visual inspection of the entire sump for water intrusion. The entire sump must be visually inspected in order to determine if there are any cracks, holes, or compromised boots located in any portion of the sump as evidenced by water intrusion.

Step 3 – Document whether the containment sump passes or fails the integrity verification. No water intrusion into the containment sump is considered a pass. Any water intrusion, regardless of the amount, into the containment sump is considered a failure.

Note: Failed sumps must be repaired or replaced within 30 days of failing the test unless an alternative timeframe is granted, in writing, by DEQ. UST owners must submit a UST-ENF-04 form 30 days prior to conducting a UST system repair or UST system renovation. Repairing a failed containment sump is allowed prior to submitting the UST-ENF-04 form, but the form must be submitted to DEQ within 30 days of completion of the repair detailing the nature of the repair. Repair of a containment sump does not require a certified worker. Installation of a containment sump is an installation-critical juncture and requires a certified worker. Containment sumps used for interstitial monitoring must be tested after repair or replacement.