



Repairing Sumps and Under-Dispenser Containment (UDC)

Sumps and under-dispenser containment (UDC) act as secondary containment and collection points for releases from product piping and dispensers, and if they are not liquid-tight, there is a risk of a release to the environment. Therefore, sumps and under-dispenser containment (UDC) are required to be routinely tested for tightness, and if they are found to not be liquid tight, they are required to be repaired immediately. This document provides general guidance for the Rules and policies associated with repairing sumps and under-dispenser containment.

 **This information does not apply to spill containment basins— they cannot be repaired, only be replaced!**

What happens if a sump or UDC fails testing?

- DEM has made a temporary policy change which allows product pipelines or dispenser which uses the failed sump or UDC as secondary containment to continue to be used for 30 days, instead of taken out of service immediately as required by the UST regulations
- The component must be repaired within 30 days or placed into temporary closure and taken out of service. Variances may be available for up to 90 days to allow continued operation and more time to perform a repair. For more information, review the variance policy available here: <http://www.dem.ri.gov/>

Diagnosing the Problem

It is important to properly diagnose the problem and find the source of the leak, as it can make the difference between a quick and inexpensive repair:

- If the problem is a failed tightness test caused by a loose or damaged piping test boot, this is a relatively easy fix, and most contractors can perform the repair;
- However, if the failed test is caused by failure of the sump itself, specialized skills, certifications, and methods are required;



Who can perform repairs on sumps or under-dispenser containment?

While any licensed contractor can replace or tighten test boots on the product piping, repair of the sump or under-dispenser containment requires highly specialized skills, certifications, and licenses. Any individual wishing to perform these repairs must be trained and certified in accordance with NLPA/KWA Standard 823.

What repairs are allowed?

All repairs must be compliant with NLPA/KWA Standard 823.

- No sealants, epoxies, caulking or silicone-like materials are allowed;
- All repair materials must be UL listed for use in the presence of petroleum products and 100% ethanol;
- Fiberglass sumps and UDCs must be repaired with a minimum of 3 layers of fiberglass cloth embedded in resin UL-approved for this use;
- Polyethylene sumps must be repaired using a material that is chemically bonds to polyethylene and is approved by the sump or UDC manufacturer;
- Linings without underlying repair are prohibited;

 **If you suspect a release has occurred, you are required to report it to the RI DEM UST program immediately by calling (401) 222-2797**



Repair Requirements:

- Submit the *Sump and Under-dispenser (UDC) Repair Application*, available on our website at <http://www.dem.ri.gov/ust> to the RI DEM UST Program
- The application will be reviewed and if complete, a approval permit will be issued which contains site-specific repair and testing requirements
- Typical testing requirements include, but are not limited to:
 - Tightness testing of product piping primary wall and interstitial space
 - Full level Hydrostatic tightness testing
 - Functionality test of liquid sensors
- Post-construction inspection by a DEM UST Program Inspector



Sumps with missing entry fittings causing leaks

Environmental Assessment

Environmental assessment is typically not required if a sump or UDC is repaired. However, an assessment may be required if

- The sump or UDC has held regulated product within the past 12 months
- There is an active leak of regulated product into the sump or UDC
- Evidence of release or unexplained loss of product from the UST system

Final environmental assessment requirements are at the sole discretion of DEM and any requirements will be included in the approval permit.



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Limitations

Repair of a sump or UDC is a significant undertaking, and it is important to remember:

- The walls for sumps and UDC's can only be repaired ONCE;
- Repairs to polyethylene sumps and UDCs are more difficult and more failure prone, and it may be necessary to construct a fiberglass "sump within a sump" to adequately repair the sump
- Fiberglass repairs can be tedious and sensitive to mistakes, and it is important that the individuals performing them are qualified, experienced, and follow the correct procedures. This is not an area where you want to go with the lowest bidder!
- This information does not apply to spill containment basins (e.g., spill buckets). Single-walled SCB's cannot be repaired, they can only be replaced!
- It is important to assess the overall condition of the sump and UDC to decide if it makes more sense to replace the sump rather than repair it; In some cases, it may make long-term financial sense to install a new sump or UDC rather than repair one in poor condition that will require additional repairs

If you have questions on these requirements for UST systems please contact
DEM.USTquestions@dem.ri.gov