



# Tightness Testing of Spill Buckets, Sumps, and Under-Dispenser Containment

## State of Rhode Island UST Management Program

In 2015, the U.S. EPA issued the first revisions to Federal UST regulations since 1988. Among the many changes is a requirement to routinely test spill containment basins (e.g., “Spill Buckets”), sumps, and under-dispenser containment to ensure that they are liquid tight. These rule changes were incorporated into the 2018 revision of the State of Rhode Island UST Regulations, and because Rhode Island has delegated authority through the State Program Approval (SPA) program, RI DEM enforces these regulations on behalf of U.S. EPA. **As a result, all spill containment basins, sumps, and under-dispenser containment must be tested for tightness in accordance with RI DEM requirements prior to October 13th, 2021.**

### Why is this requirement necessary?

Sumps, spill containment basins, and under-dispenser containment are subject to harsh weather conditions, large temperature swings, damage from vehicles and plows, and exposure to harmful chemicals. As a result, these components can rapidly degrade or become damaged and are no longer liquid-tight. Ensuring these UST Components are liquid tight can prevent the release of materials and reduce costly cleanup costs and potential human exposure.

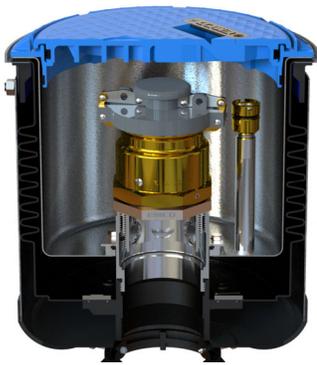
 **It is important to remember that Rhode Island testing protocols, requirements, and licensing are different than the minimum federal requirements, and you are required to follow the Rhode Island requirements!**

### What are the requirements for Spill Containment Basins (SCBs)?

Spill containment basins come in two varieties: single-walled and double-walled. The easiest way to tell the difference is to open the cover and see if there is an indicator gauge inside (an example can be seen to the right)—if there is, it’s likely a double-walled

basin. Please see below for the different requirements:

- **SINGLE-WALLED SCBs:** Must be tested prior to October 13th, 2021 and every three years thereafter by a DEM-licensed tester. All single-walled spill containment basins must be tested using either the DEM or PEI full-level hydrostatic or vacuum test method.
- **DOUBLE-WALLED SCBs:** Routine testing is not required, however, the Class A/B operator is required to inspect the spill containment basin and gauge during their monthly walk-through inspections. If the gauge indicates that the spill containment basin is no longer tight, than further investigation and testing is required to determine if either the primary or outer wall remains liquid tight.



Emco-Wheaton Double walled Spill Containment Basin



DW Spill Containment Basin Indicator Gauge



**DEM must be notified within 24 hours if a spill containment basin, sump, or under-dispenser containment is found to no longer be liquid tight by calling (401) 222-2797**



### What are the Requirements for Sumps and Under Dispenser Containment basins?

All STP, piping, and transition sumps and under-dispenser containment must be tested for tightness BEFORE October 13th, 2021 and every three years thereafter by a DEM-licensed tester using a method approved by DEM. Low-level testing can only be used on systems that have automatic shutdown devices and have prior approval from DEM. A complete list of facilities eligible for low-level testing is available on our website at <http://www.dem.ri.gov/>

## Who can perform tightness tests on sumps, UDCs, and spill containment basins?

All tests must be performed by a DEM-licensed 3rd party tester using an DEM-approved method. A list of companies who are licensed and eligible to perform tightness testing in RI is available on our website at:

<http://www.dem.ri.gov/programs/benviron/waste/pdf/lictesters.pdf>

## What happens if a sump, UDC, or spill containment basin fails a tightness test?

If the sump, spill containment basin, or under-dispenser containment fails, it is not liquid tight and will not hold petroleum or hazardous materials and is required to be taken out of service until it is replaced, repaired.

**In some cases, you may be able to obtain a variance to temporarily operate the failed component with extra precautions, however, you must submit a written request to DEM!!**

- **SINGLE-WALLED SCBs:** If a single-walled spill containment basin fails a tightness test, it must be immediately taken out of service.
- **DOUBLE WALLED SCBs:** If the interstitial monitoring device on a double-walled spill containment basin indicates a failure, DEM must be notified within 24 hours of the failure and further investigation is required to determine the source of the failure;
  - ⇒ If the primary wall of the spill containment basin is determined to be liquid tight, the spill containment basin can be regulated as single-walled, however will be required to have a tightness test every 3 years
  - ⇒ If it is determined that either the primary wall or the outer wall is responsible for the failure and no longer liquid tight, the spill containment basin must be taken out of service immediately. Any fuel remaining in the UST may continue to be used, however no deliveries can be made until the spill containment basin has been replaced and passed tightness testing.
- **SUMPS AND UNDER-DISPENSER CONTAINMENT:** If a sump or under-dispenser containment fails a tightness test, the product piping and/or one or more dispensers may be required to be shutdown and disabled. The exact requirements will depend on the configuration of the system, and DEM will provide guidance on what actions must be taken.

## When should I perform the necessary tests?

DEM recommends that you get your sumps, under-dispenser containment, and spill containment basins tested as soon as possible in order ensure you not only meet the deadline, but have ample time to address any issues that may be discovered or perform repairs and limit disruptions to your business. If you wait until the last minute, you might face long wait times, parts shortages, and may result in the UST system to be out of service longer than otherwise necessary. If you miss the deadline, you may be subject to financial penalties.



## Can the failed components be repaired?

It depends on the component and reason for failure. In some cases replacement is necessary.

- **Sumps and Under Dispenser Containment basins:** The most common cause of failure are failed or loose piping boots. This is typically a simple repair that can be done quickly by a qualified individual. If the boots are not the source of the leak, prior DEM approval will be required for any repairs. An application must be submitted and we will review it to ensure the proposed repair method is accordance with manufacturers specifications and requirements using UL-listed materials, performed by a qualified, licensed, and property trained individual, and follows a method recognized by RI DEM.
- **Spill Containment basins:** Single-walled SCBs cannot be repaired and must be replaced with a double-walled model. Double-walled SCBs can be repaired only if repair parts are provided by the manufacturer and is b performed by an individual trained and certified by the manufacturer.

**If you have questions on these requirements for UST systems, please contact :**

**[DEM.USTquestions@dem.ri.gov](mailto:DEM.USTquestions@dem.ri.gov)**