New UST Rules Require Testing of Sumps, Spill Buckets, & Overfill Devices

If the manufacturer of the sump, spill bucket, or overfill prevention device has recommended a specific protocol for testing that component, follow the manufacturer’s recommendations. If there is no recommended testing protocol established by the manufacturer, you can follow the procedures outlined in PEI RP 1200. We are also open to alternative proposals and will evaluate them on a case by case basis.

How does one test a spill bucket or a sump? The most common test for sumps and spill buckets is a hydrostatic test, in which the sump or bucket is filled with water and allowed some time to stabilize. Once it has stabilized, the water level is very carefully measured, and after one hour, the water level is measured again. If the water level has dropped by one eighth of an inch or more, the component fails the test. Given that the pass/fail margin is only an eighth of an inch, it goes without saying that the measuring stick must be in the exact same position for both readings, and measurements must be done very carefully. If a sump is wired such that the submersible pump or dispenser will automatically shut off any time the electronic sensor goes into alarm, then we allow low-level hydrostatic testing, in which only the bottom 4 inches of the sump are tested.

We will allow tank owners to do the tests themselves but be warned: the procedures spelled out in PEI RP 1200 are involved and very specific. If a tank owner does not follow those procedures exactly, we may reject the results. In the end, it may be easier and create fewer headaches to hire a qualified contractor to conduct the tests.

Testing water can be re-used. Obviously, test water will last much longer if sumps and spill buckets are cleaned before they are tested. We see many sumps that have large amounts of dirt, sludge, and other crud. If those sumps are not cleaned before testing, the test water will be chocolate-milk brown very quickly, and at that point it cannot be re-used. Once the water is no longer suitable for continued testing, it must be managed in accordance with the requirements of the Vermont Hazardous Waste Management Regulations.

Overfill prevention devices are usually tested by removing them from the tank system and physically examining them to ensure that the function correctly. Some manufacturers make fill pipe shutoff valves that can be tested by lowering a special tool down the fill pipe and activating the shutoff function. Those devices do not have to be removed from the fill pipe. Ball float valves and high-level audible alarms must be removed and physically examined to ensure that the still function correctly. Any ball float valve that is found not to be working correctly (e.g. the ball is missing from the cage) must be completely removed from the tank, and another method of overfill prevention must be installed.

Test results must be reported to the UST Program within 30 days of the completion of the test. If a component fails its test, it must be repaired or replaced immediately, and the UST Program must be told of the new component. If there is reason to believe a failed component might have led to a release of petroleum product to the environment (e.g. a leaking spill bucket), a limited site assessment must be conducted by a qualified environmental consultant. It will be a big job to implement these new testing requirements. We know that. It will be an inconvenience and an expense to conduct these tests, and September of 2020 will be here before we know it. The first round of testing will almost certainly identify many leaking components that have to be repaired or replaced. Clear communication about testing and test results will help ensure repairs are done quickly and facilities operating in compliance.