VERMONT

AGENCY OF NATURAL RESOURCES
DEPARTMENT OF ENVIRONMENTAL CONSERVATION

UST TALK

A Newsletter for Underground Storage Tank Owners/Operators
Published by Waste Management Division
Underground Storage Tank (UST) Program

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Potential Line Leak Detector Malfunction

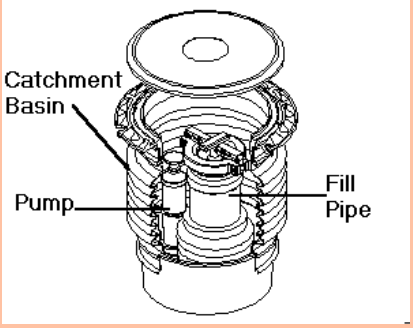
Red Jacket mechanical line leak detectors (MLLD) manufactured between December 2006 and May 2007 may have a faulty seal when installed on your submersible turbine pump, allowing product to leak from the pump. The Red Jacket Company has stated that only a small percentage of units manufactured during that period have the defect. The Vermont UST Program knows of one owner who had to replace his MLLD twice because product was leaking from the pump. Enough product was released to trigger the electronic sensor alarm. The seal can be tested at the time of installation by operating the pump with a pressurized line and checking for any product seepage around the connection of the MLLD to the pump.

Spotlight on BMPs: Spill Buckets

No UST system is complete without a spill bucket at each fill port. You must check your spill bucket before and after each fuel delivery to remove any water or fuel. Or perhaps your spill bucket is *always empty*! That might sound like a great thing, but it could mean that spilled fuel is leaking out of the spill bucket and into the environment. A recent study of USTs in Florida found that spill buckets were the source of nearly half of all UST leaks!

While it is not required, the UST Program recommends as a Best Management Practice (BMP) that tank owners inspect and test their spill buckets to see if they are able to hold liquid. If you have to periodically empty rainwater from your spill bucket, then that suggests that the device is doing its job. If not, first inspect the inside of the bucket for any holes, cracks, warps, or loose parts. If there are no visible problems, pour water in. Likely locations for leaks are at the base where the bucket is bolted down around the fill pipe, or around any rubber or plastic collar. Only pour in as much water as you need to. If you don't see an immediate drop in the water level, mark the water level with chalk and check it the next day. If the water level hasn't changed, your spill bucket is probably okay. If you lose water, you need to repair or replace the bucket.

If you don't have a leak, remember to remove the water from the bucket. If there is noticeable fuel residue in the bucket at the time of the test, or if the test water has a noticeable sheen on it, you must dispose of it as a hazardous waste (perhaps you already have a drum onsite for such liquids). Or, you can keep it in a closed, labeled container and use it again and again as your "spill bucket tester."
Testing your spill bucket even just once a year could help prevent leaks that could impact you and your neighbor's environment. For more BMPs, check out the UST Operation and Maintenance Manual (a.k.a. ERP Self-Certification Workbook) on our website, http://www.anr.state.vt.us/dec/wastediv/ust/home.htm



Spill Bucket

Do You Have a Lined Tank?

As all Vermont tank owners and operators know by now, Vermont has a new set of UST Rules in effect, and those rules brought many changes in the way category one tanks must be managed. *Continued on page 3*

TANK OWNERS AND OPERATORS TAKE NOTE OF THE FOLLOWING LETTER MAILED TO CONTRACTORS WHO PERFORM CATHODIC PROTECTION TESTING ON PROTECTED STEEL TANKS

November 28, 2007

Dear UST Contractor:

Vermont's new UST Rules, which became effective on August 1, 2007, contain important changes in requirements for monitoring of cathodically protected USTs. Three of the most important changes are listed below:

Impressed current systems have to be inspected and tested at least annually. This has been required by EPA's federal regulation since the 1980s, so it is really not new. Vermont's 2007 rules require that the person inspecting and testing the system must be a certified or licensed professional engineer with expertise in corrosion control of buried metal pipes and tanks; or a person certified by NACE International as one or more of the following: Corrosion Specialist, Cathodic Protection Specialist, Senior Corrosion Technologist, Corrosion Technologist, or Cathodic Protection Tester.

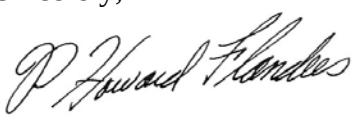
Systems using field installed galvanic anodes must be tested every year, not every three years. We all know that in recent years many tanks with factory installed galvanic systems (sti-P3, or tanks built to a similar Canadian standard) had their anodes fail, which required the installation of supplemental anodes. Because these systems have been modified substantially, they must be tested annually, not once every three years.

Beginning June 1, 2008, anyone testing a cathodic protection system must be NACE certified as a Cathodic Protection Tester, or hold an equivalent level of expertise. We realize that many contractors will have to take additional training this winter or spring, but having knowledgeable and qualified testers is essential to ensure that Vermont's population of cathodically protected tanks will not corrode. Becoming a NACE certified Cathodic Protection Tester involves taking a week-long course, and passing a rigorous exam. You can take the exam without first having taken the course, but only those who are very well versed in the principles of cathodic protection testing should consider this option. NACE certification is widely considered to be the most in-depth program available, but if the NACE course schedule is not convenient, you might consider an equivalent level of certification. Some training courses that are available include the short course in cathodic protection offered by West Virginia University, or the Steel Tank Institute's course on testing cathodic protection systems on USTs. The International Code Council (ICC) does not offer training courses, but offers an exam on UST cathodic protection which may be equivalent to NACE certification. For more information visit these web sites:

- NACE International: www.nace.org
- International Code Council: www.iccsafe.org
- Appalachian Underground Corrosion Short Course: http://aucsc.com/

Please contact the UST Program staff at 802-241-3888 if you have any questions.

Sincerely,



P. Howard Flanders, Director
Waste Management Division

UST Loan Program expanded to include REMOVAL

Loans

The Agency of Natural Resources (Agency) has funds available to make individual loans of up to $75,000 for the **removal, replacement or upgrade** of an underground or aboveground storage tank used for the storage of petroleum products for the purpose of reducing the likelihood of a release of petroleum into the environment. For tank owners with five or less facilities the interest rate is 0%. For owners with more than five facilities the interest rate is 4%. Applications are processed similar to a Bank loan and collateral and/or personal guarantee is required. For information and an application, please contact June Reilly of the UST Program at 802-241-3871.

Tank owners, who have permanently out-of-service tanks that have been out-of-service for more than a year, should consider applying for a loan to voluntarily comply with the requirement to permanently close out-of-service tanks after one year. In 2008 registered owners of these tanks will be receiving a notice to perform the tank closure during the 2008 construction schedule. Voluntary compliance without being reminded is appreciated by the UST Staff.

Owners of category one tanks (also known as permitted tanks) are reminded that financial responsibility for their out-of-service tanks is required to be maintained until the tank has been closed in accordance with the UST rules.

Do You Have a Lined Tank? (Cont. from pg 1)

One new requirement is that lined tanks that lack secondary containment must be internally inspected periodically. That means that if you have a single wall tank that has been lined, it has to be internally inspected within ten years of the date it was lined, and every five years thereafter. Why inspect the lining? Unfortunately, linings don't always adhere to a tank's interior surface as well as they should. There are many documented instances of interior linings peeling off a tank's inside, with a jumble of fiberglass and/or ceramic pieces accumulating on the bottom of the tank. All tanks in Vermont that were lined either had some problem with the original tank, or were single wall tanks that originally had no form of corrosion protection. The purpose of lining a tank is to minimize the chances of a release to the environment, and because lining cannot be assumed to be adhering to the tank, we require periodic inspections. So, if lining is potentially troublesome, why do we require inspections just for single wall tanks? Simple: by monitoring the interstitial space regularly, the tank owner or operator is constantly checking to be sure the interior wall of the tank is tight. If the interior lining is peeling off the inside of the tank, chances are that product will be discovered in the interstitial space. And that, of course, is just one more reason why we require constant electronic monitoring or weekly manual checks of the interstitial space, and written records documenting the results of electronic and manual monitoring. Every owner of a tank known to be affected by this change in rule will receive a letter within the next few weeks reminding them of this new requirement. If you own a single wall tank that was lined ten or more years ago and you do not receive a letter by February 1, please contact the UST Program so we can double check our records.

Replacement of incompatible overfill device required by UST Rules

Adopted 8/1/2007

In the past, the UST Program has been strongly recommending to tank owners/operators operating tanks with vent restriction overfill protection devices (aka ball floats or float vent valves) to replace them with flow shut-off devices (aka auto-shutoff valves or flapper valves) for their ***suction pumping*** tank systems. **After August 1, 2007 owners that have a vent restriction device (ball float) with an incompatible UST system are required to replace it with a device that is compatible with their type of system.**

WHY REPLACEMENT?

Ball float valves are incompatible with suction dispensing systems because pressure inside the tank created when the ball float valve seats can force the liquid product out the air eliminator at the dispenser, causing a serious spill.

The Petroleum Equipment Institute's "Recommended Practices 100-2005" has also determined ball float valves must not be installed on:

- Tanks equipped with remote-fill pipes and gauge openings;
- Emergency-generator or heating oil supply tanks
- Tanks with coaxial Stage I vapor recovery.

Ball floats are allowed on pressurized piping systems with two point vapor recovery.

Within 30 days of replacing the overfill device, the Permittee (the tank owner or operator) shall inform the UST Program in writing that the device has been replaced.

When installing flow shut-off devices, do not install a ball-float vent unless the ball-float activates at a level higher in the tank than the flow shut-off device. You don't need both but if you want a second overfill device install an alarm that rings outside for the delivery person to hear!

Times running out!

DEADLINE: DECEMBER 31, 2007

UST Self-Certification

As of 12/1/2007 we have received 390 self-certifications, which mean we have not yet received the certifications for approximately 700 stations. The deadline is almost here! We encourage tank owners to file on-line, and in order to do this, you must register using the Access Code that was sent to you last summer. If you have lost it, and need your Access Code call the UST Program Staff at 1-802-241-3888.

Amy Norris of R. L. Vallee, Inc., a company which owns many facilities in Vermont, sent us the following comment on the self-certification, "*As we began the Self-Certification process we were overwhelmed with the number of hours needed to complete this extensive program. Having said that, I must say that it has been a great value to us in increasing our understanding of the regulations, evaluating our equipment and installations, and fixing many small issues that in the long term could have become bigger problems*."

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