STATE OF VERMONT

VERMONT

UST TALK

A Newsletter for Underground Storage Tank Owners / Operators

Published by Waste Management & Prevention Division

Underground Storage Tank (UST) Program

Agency of Natural Resources, Department of Environmental Conservation
103 South Main Street, West Bldg., Waterbury, VT 05671-0404

UST Staff

Marc Roy– 241-3874	Ted Unkles—241-3882	June Reilly-241-3871	Susan Thayer—241-2361	Jaymi Cleland-241-1060
Marc.roy@state.vt.us	Ted.unkles@state.vt.us	June.reilly@state.vt.us	Susan.thayer@state.vt.us	jaymi.cleland@state.vt.us

UST Facility Trends:

Over the years, the VT landscape has changed markedly. Fewer working farms, more roads and homes. Add another one to the list: a change in the number and type of gas stations.

When the UST Program was developed in 1985, almost every village and crossroads had a store or garage where gas was sold. Over the years, more and more of these gas stations have either stopped selling gas as part of their operations, or gone out of business altogether.

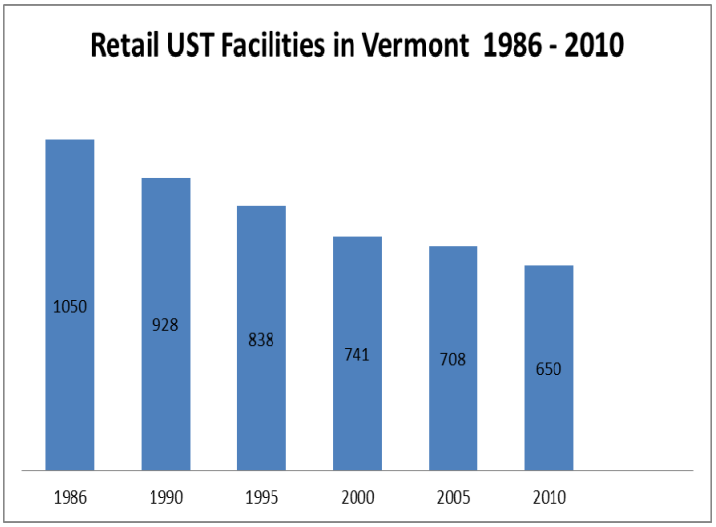
The graph below shows how many gasoline stations have stopped selling gas, in five year periods since 1986. The steady decline in these facilities, plus the decline in other types of facilities (notably town and VTrans garages) results in there being 450 fewer regulated facilities in 2012 than there were in 1990.

What's Inside

"There are many reasons for the decline" says UST Program Permit manager June Reilly. "Competition from multi-facility owners, fluctuations in the price of fuel, and the economic difficulties of the past few years all play into this. In addition to the decline in the number of facilities, we are seeing a number of stores where the tanks have been placed out-of-service while people try to sell the business. We're guessing that many of those tanks will be permanently closed as well, because new owners don't want to deal with the risk of underground tanks."

"We're not really sure if this is a good thing for VT or not" says Reilly, "but it's an on-going situation that I don't think will reverse". That sentiment was echoed by Jim Harrison of the Vermont Grocers Association who says, "The retail landscape, especially in rural areas like Vermont, continues to evolve. With increased costs to upgrade equipment and lower overall gasoline usage, we are likely to continue to see some decline in retail gasoline outlets going forward."

Based on the UST records, the following is a graph showing the number of retail facilities that were in business in 1985 when the UST rules became effective and in the last 20 years have ceased being a retail outlet. A large percentage of the facilities no longer exist.



GAS/WATER SLUSH

Recipe for a Problem

Most gas stations generate hazardous waste in the form of water/fuel mixtures at some point in their operations. With the on-set of cold weather, containers of water/fuel mixtures must be stored in a heated space to prevent them from freezing.

Water/fuel mixtures (generated from the removal of water from the bottom of the USTs, or cleaning out sumps and spill buckets) are typically stored in 55-gallon steel drums. If left outside or in unheated buildings and exposed to consistently freezing temperatures, the water portion of the waste freezes and expands. This can result in rupturing or bulging of the drum, which then may leak when the waste melts. Or, the expanding water can push the un-melted waste portion up through the top of the drum resulting in a release.

Many mini-marts do not have a lot of heated space in which to store drums of hazardous waste, so owners/operators should make arrangements with hazardous waste transporters to remove the wastes immediately after generation. Don't stick the drum somewhere "out back" to get lost in the snow; come springtime you may find a damaged drum that has leaked. In addition to needing a cleanup, storing freezable hazardous waste outside in winter is a violation of the Hazardous Waste Management Rules that could result in an enforcement action.

COMPLIANCE TOOL

RED TAG

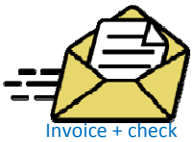
Red Tags are a fairly new enforcement tool in the UST Program compliance toolbox. Although they have not been used very often, they have proven very effective at getting facility owners to perform work needed to come into compliance.

If a UST inspector finds a facility with dangerous compliance problems, or if owners/operators fail to conduct needed testing or maintenance, the UST Program may decide to affix Red Tags to the fill ports of the facility tank systems. The metal tags read "Do Not Fill", and serve to prevent deliveries to the facility. Needless to say, owners have been very quick to take necessary actions to return their UST system back to service.

Red Tags were applied to three operating facilities in 2012, and in all three cases compliance with UST Rules was achieved within days. There are also red tags affixed at out-of-service facilities where the UST Program has been unable to contact the owner, to try to ensure operations do not resume without system inspection, needed testing, and permitting.

State UST Programs are required to have red-tag authority by the 2005 Federal Energy Act. The VT UST Program obtained authority to red-tag facilities that are out-of-compliance through legislation passed in 2007.

UST Permits, Loans, and Assessment Fees


Invoice + check

It is important to return the invoice along with your check when making a payment on your UST Permits, Loans, or Assessment fees. There is a higher chance that if the ID number is not included with the check, your check could be applied to the wrong account.

When your **Assessment** fees are due please read the invoice carefully regarding the amount you need to pay. The assessment fees are variable depending upon tank construction and type of facility. Do not confuse the **Assessment** fee with the **Permit** fee, although they look similar. And if at all possible, send separate checks if you are paying for a loan, permit fee, or assessment fee. Combining them may result in errors.

OVERFILL PREVENTION DEVICE

I have an overfill prevention device, so why did this spill occur?

Overfill prevention is one of those issues that are of great interest to UST regulators, but that may not rank all that high in the day-to-day priorities of UST facility operators. But a recent spill demonstrated the need for people to understand how overfill prevention devices work, and perhaps more importantly, how they don't work.

A certain convenience store in Orange County sells a moderate amount of on-road diesel fuel, and therefore has a relatively small diesel tank. Their petroleum distributor recently sent a peddle truck to deliver 800 gallons of diesel fuel to top off the tank. The driver inserted the delivery nozzle into the 4-inch fill pipe, and after several minutes of uneventful delivery, was surprised to see diesel fuel spraying up out of the fill pipe, like a small geyser. Fortunately, the driver stopped the delivery immediately, so the resulting spill was relatively minor, and was easily cleaned up.

But what caused the spill? Very simply, it was the fact that an automatic fill pipe shutoff device (a.k.a. "flapper valve") is not compatible with a loose fill delivery.

Figure 1 below shows a loose fill situation where the nozzle of a typical peddle truck is delivering product down a 4" fill pipe. As long as the automatic fill pipe shutoff remains open, there is no problem.

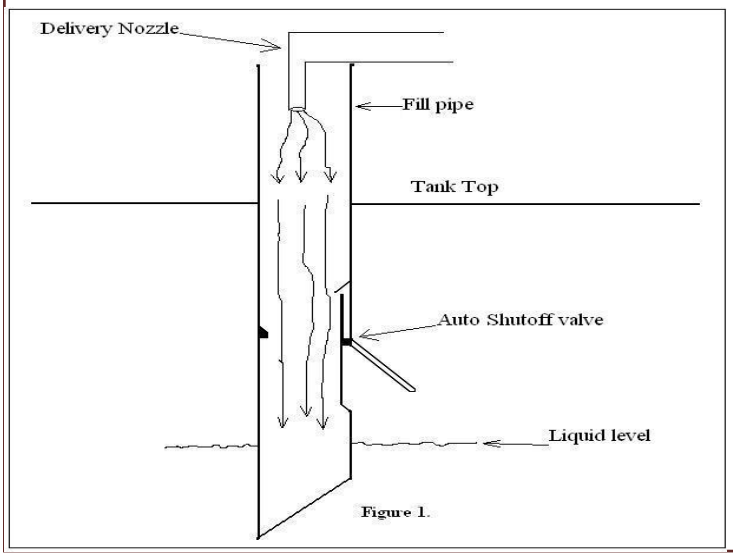


Figure 1.

But Figure 2 below shows that when the tank fills to the level at which the fill pipe shutoff valve closes, the delivery instantly becomes a huge mess. The product gushing from the nozzle splashes off the closed valve, and the only place it can go is back up the fill pipe!

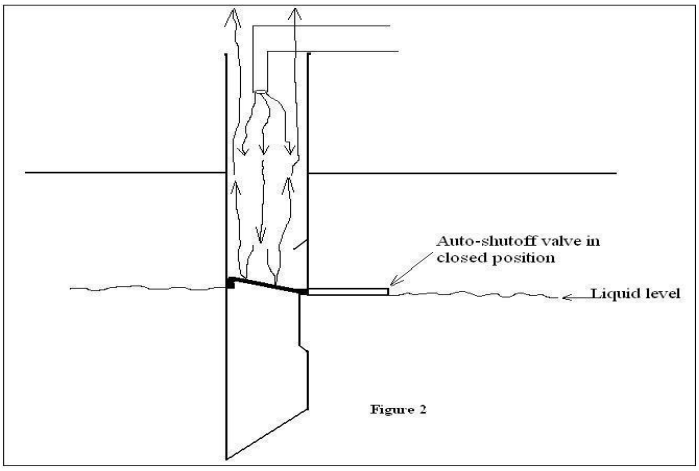


Figure 2

Note – both diagrams (Figure 1 and Figure 2) are not to scale, and for the sake of clarity we have omitted several of the UST system components (spill buckets, etc.).

This is only one example of an overfill prevention device that is incompatible with a delivery system. Another common problem is that ball float valves are incompatible with peddle truck deliveries and with coaxial stage I vapor recovery.

It is critically important to understand what type of overfill prevention device you have, and how it interacts with the delivery method that your tank system receives. In the example, the store owner should have specified that the delivery had to be made by a large transport tractor-trailer. If, for reasons of economy, the owner wanted to received deliveries from a peddle truck, then the fill pipe should have been adapted for peddle truck delivery, and the fill pipe shutoff should have been replaced with an audible alarm connected to the electronic in-tank monitor.

Also, it should go without saying that even with the wrong type of delivery truck, this spill should not have happened, since the delivery driver and a representative of the tank owner should have checked and confirmed that there was more than adequate capacity in the tank to take the delivery. Remember, you are the most important piece of overfill prevention equipment!

Operator Training – The ABCs of Monthly Inspections

As of August 1, 2012, every permitted facility must have a designated A and B operator. **One of the more important responsibilities for the A/B operator is the monthly facility inspection requirement.** Routine facility inspections conducted by state inspectors reveal that some operators forget to perform and document their monthly inspections.

The Class A or B operator, or a person working under the supervision of a Class A or B operator, is required to conduct and document a monthly inspection of the facility. The operator must inspect the facility for any conditions that would require an immediate response, such as any indication of a spill or release or any alarms indicating a possible release. A sample checklist is included in Appendix A of our guidance document "Vermont Underground Storage Tank Operator Training Guidance", which can be found on our website http://www.anr.state.vt.us/dec/wastediv/ust/pubs/OperatorTrainingGuidance.pdf. This sample checklist is provided as a convenience to tank owners and operators. You are not required to use this checklist, but at a minimum, you must document the same information the sample checklist covers. You are required to keep this monthly documentation on file for one year.

State inspections in 2013 will include a review of monthly inspection documentation. Failure to comply with this monthly requirement will be considered a violation of Vermont UST Rules.

Questions? Please visit the Vermont UST Program's website:
http://www.anr.state.vt.us/dec/wastediv/ust/Training.htm or http://www.anr.state.vt.us/dec/wastediv/ust/home.htm

---

State of Vermont - Peter Shumlin, Governor
Agency of Natural Resources - Deb Markowitz, Secretary
Department of Environmental Conservation - David Mears, Commissioner

Department of Environmental Conservation
Waste Management & Prevention Division
Underground Storage Tank Program
103 South Main Street, West Bldg.
Waterbury, VT 05671-0404
Tel: 802-241-3888

State of Vermont
Agency of Natural Resources