

UST TALK

A Newsletter for Underground Storage Tank Owners / Operators

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Underground Storage Tank (UST) Program

Agency of Natural Resources, Department of Environmental Conservation

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ADOPTION OF RULES

The revision to the Underground Storage Tank (UST) Rules went through the process and the Rules were adopted on October 1, 2011. This is the fourth update to the rules since the first rules were adopted on March 1, 1987. The rules can be found at this website

<http://www.anr.state.vt.us/dec/wastediv/ust/regs/FullUSTRegs.pdf>

Also on October 1, 2011, the first Aboveground Storage Tank (AST) Rules were adopted. The purpose of these rules is to establish standards for design and installation of new installations of petroleum aboveground storage tanks. The rules can be found at this website

<http://www.anr.state.vt.us/dec/wastediv/ust/regs/ASTRules.pdf>

Happy Reading!

QUESTION #1: What years were the UST rules revised?

Answer on Page 2



Hurricane Irene and UST

Despite all the damage caused by Tropical Storm Irene, most UST systems in the state did not suffer significantly (see story on page 3 for some notable exceptions). We only had a few reports of damage to UST systems at permitted facilities. We have adherence to installation standards to thank for that! UST Program staff has been able to largely return to normal in new offices in Graniteville. We are currently pushing to complete the last of the routine (every three years) inspections before the weather ends another field season.

As for the other Sections in Waste Management Division, the Spill Program is still busy catching up on the roughly 100 fuel oil releases from home-heating oil tanks, and at least two “orphan” USTs that were washed downstream from unidentified properties. The heating oil account of the Petroleum Cleanup Fund will be used initially to pay for uninsured costs of cleanup; we anticipate FEMA assistance, but realize there are no guarantees! The Solid Waste Program has been working with communities to manage debris and cleanup, and is assisting with deconstruction/disposal of many mobile homes destroyed by the storm.

All of the Department of Environmental Conservation has been displaced from our Waterbury offices. The Water Programs (Water Quality, Wastewater, Water Supply) are all in Winooski; Air Quality Control Division is currently waiting for renovations to be completed in Fayston. All of the Waterbury phones for Winooski and Graniteville are being forwarded to the new offices, as well as US mail.

We’re trying to be as reachable and responsive from our new location as we were pre-Irene, but we are still working all the bugs out so please be patient!

Changes to the Underground Storage Tank Form

As of 9/1/2011 the Underground Storage Tank Form has been revised and only this form will be accepted in future applications for a construction or operating permit. The form can be found at this website <http://www.anr.state.vt.us/dec/wastediv/ust/permit.htm>. The UST Form consists of five pages and all sections must be completed, including a sketch plan. Applications will be returned if not complete.

A 2011 Environmental Court decision gave additional instruction to the Agency on how to implement the Legislature's declaration that groundwater is a public trust resource. In implementing this requirement, the Agency is requiring the applicant to show that the UST facility is consistent with any municipal plan and regional plan. Also, the applicant must confirm and document:

- 1) the water supply (e.g., community, transient non-community, non-transient, non community, or private well) serving the facility and that the type of facility (e.g. convenience store) is consistent with the Source Protection Plan for either Zone One or Zone Two of a public water supply source.
- 2) the type of facility is consistent with any municipal groundwater protection overlay district.

These changes to law require the UST Program to consider very carefully if a regulated facility poses an unreasonable threat to groundwater and especially to drinking water sources. The program has for many years looked at new facilities, and checked to make sure that no new category one tanks would be installed in groundwater protection areas. Now we are also evaluating whether existing facilities pose a threat to drinking water, and if so, whether additional safety measures should be implemented. If the tank ownership changes, and there are no changes to the tank(s), the new owner need only complete the first page (Facility Information Page) and submit it to the UST Program together with a check for \$10 made payable to the town or city in which the facility is located, and a check for the annual permit fee (\$100 per tank) made payable to the Treasurer, State of Vermont. However, the questions on the type of facility and water supply must be answered.

For water supply information, applicants can go to the following website <http://www.anr.state.vt.us/dec/watersup/swapp.htm> or contact your town planner (if the town has one) or regional planning commission. Find your regional planning commission at this website <http://www.vpic.info/rpcs/>.

2011 Self-Certifications! There are less than 50 days left to 2011

The days are getting shorter, and it's time to get facility inspections and certifications done! As of this writing, 22% of facilities have submitted their certifications. The internet application is unchanged from last year, and so far we have not noted any bugs or glitches. There are a limited number of fair weather days left, so get out there! Here is a short list of common problems that the self-certification is intended to address:



- ⇒ Spill buckets – the bucket should be empty of liquid or debris. You should be able to see if there are any cracks/holes in the bucket. If you have a label in the bucket to identify the product, make sure it is legible. Make sure the lid fits properly over the bucket, and the cap on the fill pipe is tight.
- ⇒ Sumps – open any piping sumps and check the liquid sensors to ensure they are working. Also make sure the sensors are set at the lowest part of the sump. Clean out any liquid. Sumps should be liquid tight. Check all metal components, and make arrangements to replace any heavily corroded components (aluminum junction boxes are very susceptible to corrosion by ethanol-blended fuel vapors in wet sumps). Petroleum vapors should not be present; if they are, you need to have a UST contractor determine the source of the vapors and make repairs. Make sure the sump lids fit securely.
- ⇒ Dispensers – open the dispenser and check for leaks. If the dispenser is equipped with a sump, check for liquid (remove if there is any and dispose as a hazardous waste). Make sure the bolts bracing the shear valves are tight.

Answer from page 1: 1991, 2007, 2009 and 2011

Answer from page 4: Porcupines

Hurricane Irene Damage to USTs

On August 28, 2011, Tropical Storm Irene hit Vermont. Hurricane Irene had already caused a wide swath of damage and destruction along much of the east coast of the US, but many people believed that since it had weakened to a tropical storm, it would pose only minor problems when it reached the Green Mountain State. As we all know, those predictions were very wrong. Although wind speeds had diminished slightly, Vermont was deluged by copious amounts of rain, which caused many rivers and streams to flood and rush through valley floors with unimaginable fury.

Hundreds of homes were flooded, and more than 100 home heating oil tanks spilled their contents in basements. DEC's spill response team worked continuously for weeks dealing with spills from home heating oil tanks. Gas stations, mini marts, and other facilities with USTs were also hit very hard. Some UST systems were severely damaged and in a few cases, the tank systems were utterly destroyed. Vermont has a zero-interest loan program for tank owners to replace or upgrade their tank systems, but as of this writing (early November) most store owners whose USTs were damaged or destroyed had not decided whether to replace their UST systems, or simply to get out of the gasoline business.



Upper Valley Grill and General Store in Groton sits beside the Wells River, which is normally a pleasant trout stream. The store had picnic tables on the grassy lawn beside the river, and during the warmer months

patrons would regularly sit beside the river enjoying their lunch. But Irene turned the normally placid Wells River into a raging torrent which jumped its banks and completely destroyed the store's parking lot and gasoline fueling area. As the parking area was scoured by the raging water the concrete slabs over both tanks were washed away. Ironically, the concrete slab over one tank ended up atop the second tank, while the first tank was completely lifted on to the ground surface. Most of the gasoline was washed out of the USTs, as when the storm was over, they were found to be filled with mostly water – just a few inches of free gasoline floated on several feet of water in both tanks. The UST system was completely destroyed, but remarkably, the store itself suffered only modest interior damage.



Blackie's General Store, in West Bridgewater, is in the narrow Ottaquechee River valley. Irene turned this river into another raging torrent, which very heavily damaged the store building, the parking lot, and the underground piping to the dispensers. The tanks themselves suffered no damage (or at least none that could be seen by looking down any of the risers).

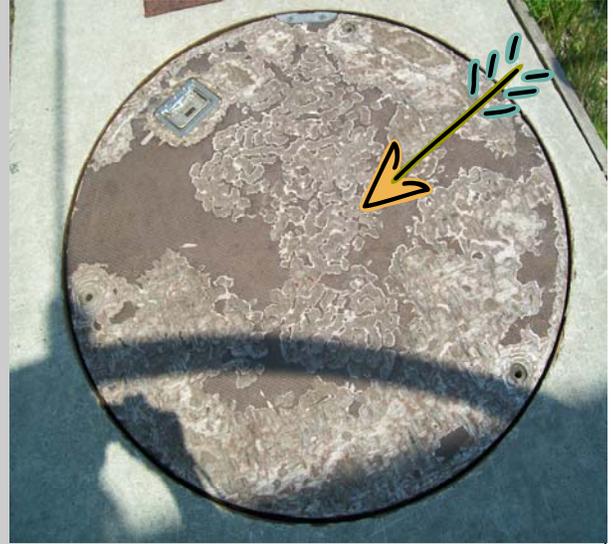


Orphan tank in the Winooski River: Even USTs that had been properly closed were subjected to Irene's fury. This tank had been pulled and cleaned, and was sitting on the ground in a salvage yard beside the Winooski river. When the river flooded, the tank (and dozens of old tires) were carried several miles downstream and ended up stranded on this island in the middle of the river.

MONITORING SYSTEM VEEDER ROOT IN ALARM

If you have one of these, it should not normally be lit up like a Christmas tree! In this case, the monitor's yellow light is warning that the product level in the tank needs is too high, and is nearing an overflow condition. The red alarm light usually warns of a serious condition such as a sensor in alarm, which could indicate a leak.

Pay attention to the alarms and lights. There is a reason for them. Check sensors before and after the snow season.



QUESTION #1:
What caused the fancy pattern
on the manhole cover shown above?
Answer: on page 2

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



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