UST Newsletter

Hazardous Materials Program
Waste Management and Prevention Division
Department of Environmental Conservation

NOV. 2023

VERMONT

IN THIS ISSUE

Preparing for the Next Flood

The flooding that occurred in July had a widespread impact on homes, businesses, and infrastructure. Central Vermont's towns and cities bore the brunt of the disaster, but impacts were felt from the Northeast Kingdom to the southern part of the state. We want to acknowledge the important work of local government and emergency personnel, non-profit organizations, and volunteers that assisted their communities during this time of need. Following Governor Scott's executive order declaring a state of emergency, state government was also involved with response and recovery efforts.

The Storage Tanks Section was relieved to receive zero reports of release to the environment from an UST system due to the flooding. While this is certainly a positive note, it is somewhat surprising, as roughly 10% of Category I UST facilities were flooded. Of particular note were the facilities that reported water ingress into their systems, as any one of these could have resulted in a major release. In three of these cases, water entered the system through the cover at the top of the fill pipe.

The pictures with this article show how the flood event affected UST facilities here in Vermont. With these images still fresh in our minds, we want to emphasize to owners/operators the importance of understanding your facility's risk of being impacted by a flood. For those facilities that are determined to be at high risk, it is critical to prepare accordingly. Please refer to **EPA's UST Flood Guide** for additional information on this topic.

EVALUATE RISK

In order to know whether flood preparation is in order for your facility, you will first need to determine if your facility is at risk. Take the actions listed in the following table in order to evaluate risk.

Actions to Evaluate Flood Risk

- View flood maps to determine the threat of flooding in your area (e.g., FEMA's Flood Map Service Center, EPA's EnviroAtlas, ANR Atlas, etc.).
- Collect data on how past flooding events threatened or impacted the UST facility.
- Complete a sensitive receptor survey of potential sites that may be affected if a release occurs.
- Determine the potential sources of flooding that could impact the UST facility (e.g., swollen rivers, flash floods, dam failure, spring thaw, etc.).

UST facilities in Vermont after July 2023 Flooding

PREPARE ACCORDINGLY

If you determine that your facility is at risk of being impacted by a flood event, there are several steps you should take in order to prepare. Refer to the actions listed on the next page.

Actions to Prepare for Flooding

- Inspect the entire facility to determine areas susceptible to flooding and the potential consequences if a flood happens.
- Assess the extent and duration of predicted flooding.
- Turn off power to STPs, pumps, and dispensers.
- Keep the release detection system on as long as power is available. Note that if power is lost and it cannot be restored within one week, facilities must be prepared to perform manual release detection, manually gauge interstitial spaces, and record findings (provided flood waters have receded and it is safe to do so).
- Take product inventory and water level readings of all tanks.
- Reduce the chance of a tank rise:
    - Place heavy objects over the tank (e.g., dumpster, sandbags, containers of sand/rock)
    - Fill the tank with fuel to decrease buoyancy by weighing down the tank so it will not float out of the ground. If the predicted flood extent and duration is excessive, owners and operators may want to consider minimizing the amount of fuel to lessen the likelihood of a release into the environment.
    - Do not fill tanks with water due to additional costs for disposing of contaminated water and possible corrosion to the tank system.
- Make sure fill caps are operable and secure.
- Place sandbags on top of the spill bucket and tank top sump lids to minimize the amount of water entering each tank.
- Make sure the seals on spill bucket plungers are operational to keep water out of the tank.
- Have an UST technician drain all product lines back into each tank, if possible.
- Close flow restrictors and manually trip shear valves on pressurized piping to prevent product releases from dispenser lines.
- Cap off vent pipes temporarily to prevent water from entering the tank and displacing product.
- Protect fuel pump and controls to prevent damage from flooding:
    - Secure dispensers with plastic, tarps, or plywood.
    - Consider removing dispensers and storing them safely if time allows.
    - Remember to also protect aboveground components from floating debris or floodwater.

It is expected that recovery efforts will take many more months in some areas. If you have any questions about flood recovery or preparedness as it relates to USTs, please contact the Storage Tanks Section using the information at the end of this newsletter. For more information on flood recovery resources from the Agency of Natural Resources (ANR), visit the **ANR Flood Recovery Resources** webpage.

Out-of-Service Tanks

We are all familiar with the concept of taking equipment in and out of service. Equipment with lots of components needs to be inspected and serviced, and sometimes parts need to be repaired or replaced. That said, the Storage Tanks Section wants you to be familiar with what exactly constitutes an "out-of-service" UST system according to the **UST Rules**, because there are several requirements that owners/operators must follow for systems that meet this definition. There are also situations that require the owner/operator to take their system out-of-service, so it's good to understand the requirements in case you need to follow them at some point. If your UST system is temporarily not in service, the liquid level in the tank has been dropped to the lowest draw-off point or lower, and you notify the UST Section, the tank is considered "out-of-service."

TAKING AN UST SYSTEM OUT-OF-SERVICE

There are a few reasons an UST system might be taken out-of-service. When a regulated substance has been released or is leaking from an UST system, it must be taken out-of-service immediately. In this situation, the UST system must remain out-of-service until repairs are made in accordance with the UST Rules (§ 8-508), or the UST system is permanently closed (§ 8-604). In the event of a failed cathodic protection (CP) system test, if repairs to the CP system are not completed within 120 days of the failed test, the UST system must be taken out-of-service or permanently closed. For systems that are taken out-of-service for *90 days or less*, the owner/operator must meet the requirements below; for systems that are out-of-service for *more than 90 days*, the tank must be empty.

Requirements for Out-of-Service UST Systems (§ 8-602)

- Notify the Storage Tanks Section that the system is out-of-service.
- Ensure that the liquid level in the tank is lowered to at or below the lowest draw-off point.
- Ensure that the vent line(s) is left open and functioning.
- Ensure that all other lines, gauge openings, manways, pumps, and other ancillary equipment are capped or otherwise secured to prevent unauthorized use or access.
- Post signage or otherwise mark the above-ground system components to notify customers and suppliers that the system is out-of-service.
- Secure the fill pipe(s) with a lock to prevent delivery to the system.

In addition, note that all category one UST systems (i.e., all regulated USTs except those storing fuel oil for on-premises heating and those storing motor fuel for a farm or residence) that are out-of-service must comply with requirements for registration, municipal land recording, financial responsibility, and change-in-service (if applicable). All category one (see above) *and* category two (i.e., UST with a capacity greater than 1,100 gallons that is a farm or residential motor fuel tank) UST systems that are taken out-of-service but still contain regulated substance, must be monitored at least weekly for releases from tanks (§ 8-506) and piping (§ 8-507). Empty systems (i.e., no more than 1 inch of residue, or 0.3 percent by weight of the total capacity of the tank, remains in the system) are not subject to release detection requirements. Finally, be aware that cathodic protection testing requirements apply to out-of-service systems with steel tanks or piping.

While UST facilities are permitted to operate for five-year periods, permit fees must be paid on an *annual* basis. However, for tanks that are taken out-of-service in compliance with the UST Rules, a permit is not required. With this in mind, UST owners that take their tank(s) out-of-service during their five-year permit period should consider contacting the Section to discuss how this impacts their permit. If additional tanks are going to remain in operation at the facility, a permit modification is in order. If all tanks at the facility are being taken out-of-service, the permit can be terminated—otherwise, the owner will continue to pay an annual permit fee for a system that they cannot operate.

RETURN TO SERVICE, OR PERMANENT CLOSURE?

UST owners may return out-of-service systems back into service provided that they first obtain a permit from the Section in accordance with the procedures established in the UST Rules (§ 8-303). Be aware that before issuing the permit, we may require inspection, testing, repair, maintenance, and/or verification of certain components by a qualified UST contractor.

Be aware that if an UST system is taken out-of-service for more than one year, it must be closed. There is one exception to this rule: upon written request, and provided all of the applicable requirements for out-of-service systems are met, the Storage Tanks Section may allow an UST system that meets the new construction standards of the UST Rules (Subchapter 4) to remain out-of-service for more than one year. Please contact Sue Thayer with the Storage Tanks Section if you are planning to remove or take an UST out-of-service: susan.thayer@vermont.gov, 802-522-0487.

"Be aware that if an UST system is taken out-of-service for more than one year, it must be closed."

CONSIDER THE VERMONT UST LOAN PROGRAM

If you have taken or intend to take your UST system out-of-service with the intention of removing, replacing, or upgrading it, the Section wants you to be aware of the financial assistance offered through

the Vermont UST Loan Program. Owners of fewer than five facilities in Vermont are eligible for 10-year, interest-free loans of up to $150,000 for the removal, replacement, or upgrade of their USTs. The interest rate is 2% for owners of five or more facilities. The program is financed by the Petroleum Cleanup Fund (PCF) and has been operating since 1990. If you have questions about the Vermont UST Loan Program, please contact Michael Nahmias: michael.nahmias@vermont.gov, 802-522-4595. •

Submitting Test Results

Testing UST systems and components is required by Rule and helps owners/operators confirm that their tank system is functioning as designed. It also helps identify whether a system is effectively containing a regulated substance. One of the main goals of the UST Rules is to prevent releases to the environment, and there are a few test types that are required by rule: cathodic protection, if applicable (see next section); spill containment; and overfill prevention. Before we cover these testing requirements, we want to first relay a very important point: the responsibility of submitting test results when they are due to the Storage Tanks Section is that of the UST owner/operator—not the contractor that conducted the testing. Please be aware that failure to complete testing according to the requirements *and* failure to submit test results to the Section when they are due constitute *separate* violations that could each lead to enforcement measures. Refer to the following table for a summary of how often test results must be submitted.

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Required Testing Intervals

Test Record	Testing Interval
Cathodic Protection (if applicable)	• Three years if factory-installed; or • Annual if field-installed
Spill Containment: • spill buckets (single-walled) • tank top sumps • under dispenser containment	Three years for UST equipment that is not double-walled
Overfill Prevention	Three years
Line Leak Detectors	Annual

TESTING FOR CATHODIC PROTECTION

Under the UST Rules, steel tanks, steel piping, flexible connectors attached to fiberglass piping, and any ancillary equipment containing product that is in contact with the ground must be protected against corrosion. Cathodic protection (CP) is a corrosion prevention technique that protects a metal surface (e.g., the wall of a steel tank or pipe) by making it the cathode of an electrochemical cell. UST owners/operators that utilize a CP system to meet the corrosion protection requirements must ensure that testing of the CP system is completed according to the professional standards and recurring intervals established in § 8-504 of the UST Rules. Note that testing frequency depends on whether the CP system was installed in the factory or in the field. *Factory installed* CP systems must be tested every three years, whereas *field-installed* CP systems must be tested annually. It is the responsibility of the UST owner/operator to share test results with the Storage Tanks Section within 30 days of the test. In the instance of a failed test, the owner/operator must notify the Section immediately and submit results of the failed test to the Section within five days of the test.

TESTING FOR SPILL CONTAINMENT AND OVERFILL PREVENTION

UST system components including overfill prevention devices, spill buckets (single wall only), tank top sumps and transition sumps (on pressurized systems), and under dispenser containment must be tested at least once every three years. Pass results for spill/overfill must be shared with the Section within 30 days of the test, whereas results must be shared immediately in the instance of a failed test.

TESTING LINE LEAK DETECTORS

Each automatic line leak detector required for pressurized piping needs to be tested according to the manufacturer's recommendations at the time of installation, and at least annually thereafter. Pass results must be shared with the Section within 30 days of the test. Upon discovery of a line leak detector that fails to meet compliance with the manufacturer's testing criteria, the permittee or tank owner must take the corresponding piping out of service until the defective unit is repaired or a properly functioning line leak detector is installed. Wendy Edwards is the Storage Tanks Section's point of contact for UST component testing. Please contact her if you have questions about testing requirements or submitting your test report forms: **wendy.edwards@vermont.gov**, 802-522-0261. •

A Quick Note on NOAVs

When the Storage Tanks Section determines that an UST facility is not in compliance with the UST Rules, either through inspecting the facility, reviewing required documentation, or some other means, the owner will receive a certified letter referred to as a Notice of Alleged Violation (NOAV). This letter will document the rules violation(s) and explain why the facility is not in compliance. The notice will also give compliance directives that must be addressed by the dates specified in the notice. Please be aware that

most NOAVs require a *written response* from the UST owner. Documentation of the corrected violations may also be required. In some cases, significant or repeat violations will warrant monetary fines, delivery prohibition (i.e., red tagging), and/or enforcement measures. If you are not able to provide a written response to a NOAV, we recommend that you contact the Section to set up an alternate form of response. If you cannot complete the return to compliance actions within the time frame specified by the NOAV, contact the Section to request an extension. ●

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UST End of Year Summary

On an annual basis, the Section compiles figures corresponding to specific UST-related activities in Vermont. The counts of existing tanks and facilities, state-led inspections and compliance rates, and releases to the environment are all recorded over the course of the federal fiscal year (FFY), which runs from October 1 through September 30. The summary is referred to as the "UST End of Year Summary." As is federally required, we make this information available to the public each year. If you are interested further, you may access the **UST End of Year Summary** on our website. We are pleased to be able to share a snapshot here of our state's regulated USTs. ●

Regulated USTs in Vermont (FFY 23)

Total Number of UST Facilities	784
Total Number of USTs	1599
Number of UST Facilities Inspected	246
Compliance Rate	77%

Inspections Scheduled for 2023-24

Routine Compliance Inspection Data

Compliance Inspections Conducted in 2022-23	246
Compliance Inspections to be Completed in 2023-24	268

New this year, the Storage Tanks Section is issuing its list of facilities due for inspection following the end of the federal fiscal year on September 30, rather than the start of the calendar year. The Storage Tanks Section's **UST Compliance Inspections Webpage** has been updated with the **List of Facilities** due for routine compliance inspections in 2023-2024. ●

Translation Services Now Offered

ANR is committed to providing accommodations to regulated community members who speak English as a second language or have limited English proficiency. The Agency issued its final **Language Access Plan** (LAP) on January 4, 2023. The purpose of the LAP is to guide ANR's work to provide access to its

programs, services, and activities for persons with communication needs, in compliance with federal civil rights laws. The Storage Tanks Section maintains several guidance documents and fact sheets on our website, and we are currently drafting new documents as well. All of these documents can be translated into a multitude of languages upon request. Our guidance documents and fact sheets can be translated by requesting Free Language Services via email or a phone call. The notice below is being added to the Section's vital documents.

LANGUAGE ACCESS NOTICE

Questions or Complaints/Free Language Services | SERVICES LINGUISTIQUES GRATUITS | भाषासम्बन्धी नि:शुल्क सेवाहरू | SERVICIOS GRATUITOS DE IDIOMAS | 免費語言服務 | BESPLATNE JEZIČKE USLUGE | БЕСПЛАТНЫЕ УСЛУГИ ПЕРЕВОДА | DỊCH VỤ NGÔN NGỮ MIỄN PHÍ | 無料通訳サービス | ነጻ የቋንቋ አገልግሎቶች | HUDUMA ZA MSAADA WA LUGHA BILA MALIPO | BESPLATNE JEZIČKE USLUGE | အခမဲ့ ဘာသာစကား ဝန်ဆောင်မှုများ | ADEEGYO LUUQADA AH OO BILAASH AH | خدمات لغة مجانية:

anr.civilrights@vermont.gov or 802-636-7827.

The Storage Tanks Section hopes that by providing translation services to facility operators who speak a language other than English as their native language, we will be able to improve understanding of the regulations that govern UST facility operations and also increase compliance with Vermont's UST Rules. To access ANR's free translation service, please visit the **ANR Language Services** webpage. •

FOR MORE INFORMATION PLEASE CONTACT:

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Montpelier, VT 05620-3704
802-828-1138
https://dec.vermont.gov/waste-management/storage-tanks

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DEPARTMENT OF ENVIRONMENTAL CONSERVATION