

UTAH TANK NEWS

Summer
2021

Regulatory Oversight of Aboveground Storage Tanks Begin

by Mark Crim

INSIDE:

AST Regulations	1-2
Professional Licensing	3
UST Rules and Site Plats	4
DERR Investigation	5-7
What's Wrong with this Picture? and Important Dates to Remember	8
DERR Updates & Certification Corner	9

In August 2020, the State Legislative Auditor General completed an In-Depth Budget Review of the Department of Environmental Quality. The audit recommended that the Division of Environmental Response and Remediation (DERR) work with the Legislature to consider some degree of aboveground storage tank (AST) regulation as unregulated ASTs may pose environmental risks.

Numerous workgroups and legislative hearings lead to the passage of Utah's new AST regulations: House Bill SB0040S02 and Senate Bill (SB) SB-40, Storage Tanks Amendments. The bill was approved by the House and Senate in the General Legislative Session 2021 and signed by Governor Cox on March 16, 2021.

The bill addresses the regulation of storage tanks, both ASTs and underground storage tanks (USTs). Highlighted provisions of SB-40 include; the definition of terms, addressing fees, requirements that owners or operators of ASTs notify the DERR, establishes financial assurance requirements for ASTs, provides for rule making, addresses the Environmental Assurance Program and participation in the Petroleum Storage Tank Trust Fund, and imposes restrictions on the delivery of petroleum.

"Aboveground petroleum storage tank" (APST) as defined in Section 19-6-402 is a storage tank that is, by volume, less than 10% buried in the ground, including the pipes connected to the storage tank and: has attached underground piping; or rests directly on the ground; contains regulated substances; has the capacity to hold 501 gallons or more.

Tanks excluded from the definition of ASTs in this legislation are:

- used for agricultural operations, as defined in rule;
- used for heating oil for consumptive use on the premises where stored;

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~ continued on page 2

~ continued from page 1

- directly related to oil or gas production and gathering operations; and,
- used in the fueling of aircraft or ground service equipment at a commercial airport that serves passengers or cargo.

The bill has been in effect since May 5, 2021, requiring the DERR to solely manage petroleum spill reporting, investigation and cleanup for new regulated APST releases. Prior to this bill, APST releases were managed by the Division of Water Quality or the DERR, depending on site specific matters, or compliance issues.

SB-40 Dates to Remember

1. May 5, 2021: Spill reporting, investigation, and cleanup of APST releases will be managed by the DERR.
2. June 30, 2022: APST owners must complete a “Utah Notification for Aboveground Petroleum Storage Tanks” form to register their tanks.
3. June 30, 2023: AST owners must demonstrate financial responsibility.
4. July 1, 2023: Restrictions on the delivery of petroleum and possible civil penalties for APSTs out of compliance.

In conclusion, Utah’s new AST codification is here, and work has begun at the DERR to incorporate APSTs into our existing regulatory program. Take home messages are that AST petroleum spill reporting, investigation and cleanup are now managed by the DERR, as of May 5, 2021, and that the DERR is active in rule writing, with a public comment period to follow.

To read Senate Bill SB-40, follow: <https://le.utah.gov/~2021/bills/static/SB0040.html>

Please help us Get the Word Out! Aboveground Petroleum Storage Tank owners are required to submit a “Utah Notification for Aboveground Petroleum Storage Tanks” form by June 30, 2022.

The Notification form is available at:

<https://deq.utah.gov/environmental-response-and-remediation/underground-storage-tank-branch>



Certified Petroleum Storage Tank Consultant Awareness in Professional Licensing

By Mark Crim

If you have a professional license for engineering or geology issued by the State of Utah, Department of Professional Licensing (DOPL), the Division of Environmental Response and Remediation would like to remind you to use your licensing seal, as required by DOPL. Embossed or stamped seals are fine for hard copy reports, while digitized seals or digitized copies of hard copy reports that have been sealed, are the norm for electronic mediums.

Professional Engineers

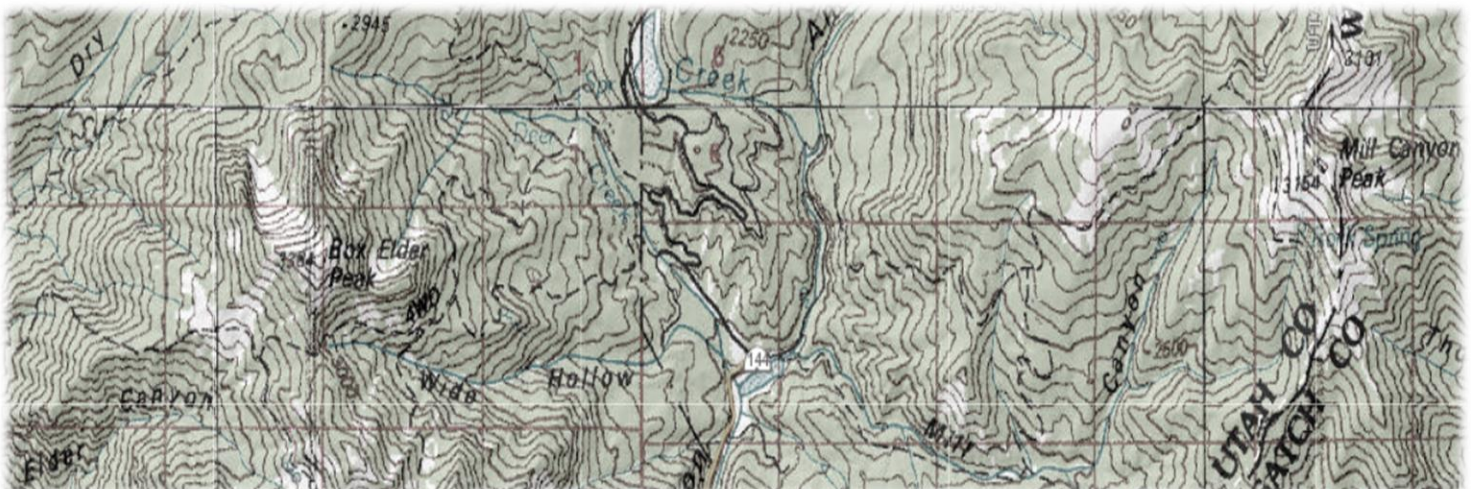
Under 58-22-602: Plans, specifications, reports, maps, sketches, surveys, drawings, documents, and plats to be sealed. Section (2) states. "Any final plan, specification, and report prepared by, or under the supervision of, the professional engineer or professional structural engineer shall bear the seal of the professional engineer or professional structural engineer when submitted to a client, when filed with public authorities, or when submitted to a building official for the purpose of obtaining a building permit, even if the practice is exempt from licensure under Section 58-22-305".

Professional Geologists

Under 58-76-602: Geologic maps, cross-sections, reports, and documents to be sealed. Section (2) states. "Any final geologic map, cross-section, sketch, drawing, plan, or report prepared by, or under the supervision of, a professional geologist shall bear the seal of the professional geologist when submitted to a client or when filed with public authorities, even if the practice is exempt from licensure under Section 58-76-304".

If you would like to see more information on these requirements, please visit:

<https://dopl.utah.gov/licenses.html>.



UST Rules and Site Plats

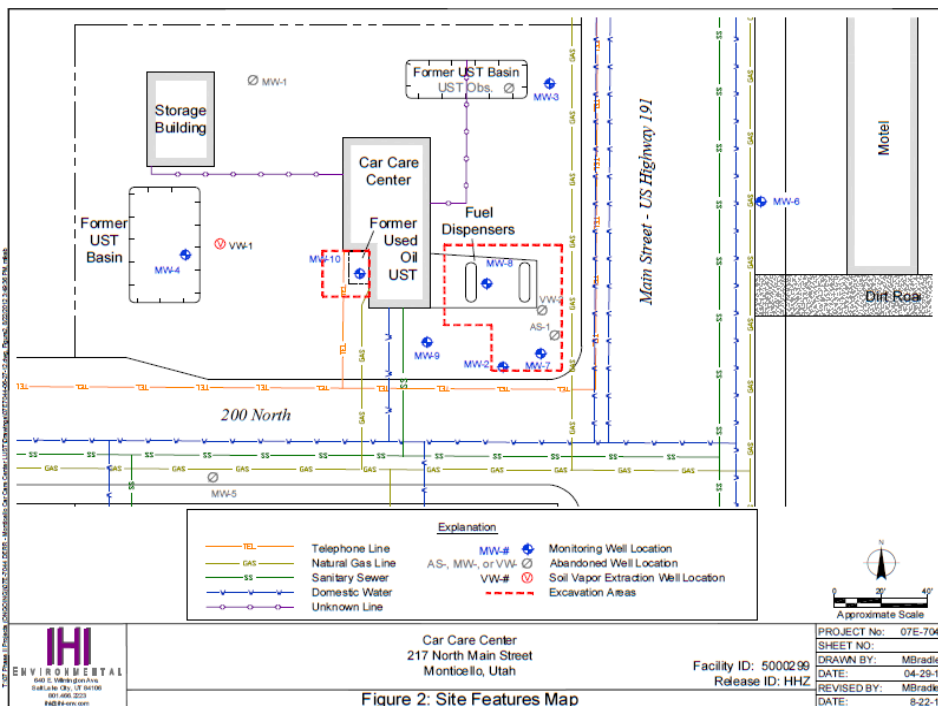
By Sean Warner and Mark Crim

A good site plat is an important tool for the initial evaluation of a closed UST system. A properly drawn site plat enables the DERR project manager to conduct a thorough receptor evaluation for the property and if appropriate, recommend the site for "No Further Action." UST rule R311-204-4 (2)(b) defines what is required for the Closure Notice site plat:

"a site plat displaying depths and distances such that the sample locations can be determined solely from the site plat. The site plat shall include: scale, north arrow, streets, property boundaries, building structures, utilities, underground storage tank system location, location of any contamination observed or suspected during sampling, location and volume of any stockpiled soil, the extent of the excavation zone, and any other relevant features. All sample identification numbers used on the site plat shall correspond to the chain of custody form and the lab analysis report."

Many of the site plats we receive focus only on the tank and sample locations, but ignore the surrounding area. Going forward, the DERR requires that submitted site plats include the necessary information outlined in R311-204-4 (2)(b), and will be placing a greater emphasis on receiving site plats that include surrounding building structures, utilities and any other relevant features. This simple task can potentially save the facility owner the cost of additional investigation.

Figure 2 as an Example of a DERR-Approved Site Plat



If you would like more information on these requirements, please visit:
<https://deq.utah.gov/environmental-response-and-remediation/rules-regulations-ust-lust>

Case Study: DERR Utilizes HSMA Fund to Investigate Residential Petroleum Vapors in Naples, Utah

By Mark Crim

On November 12, 2013, the Tri-County Health Department contacted the Division of Environmental Response and Remediation (DERR) to report the discovery of petroleum impacts at a home being constructed in Naples, Utah. The contamination was found during the installation of a sanitary sewer line beneath the basement level of the foundation. The DERR conducted a site inspection on November 14, 2013, and met with the home owner and health department personnel. Results of the inspection, including the collection and analyses of soil and groundwater samples, indicated the home under construction was resting over petroleum contamination.

Inspection observations were that the concrete floor of the basement had not been poured and that stained soil and groundwater were visible within the footprint of the basement foundation. The DERR and its environmental contractor, collected soil and groundwater samples from within the basement footprint at about 9 feet below grade. Results of the sample analyses indicated that gasoline and diesel were present, and above the DERR's cleanup standard. The DERR created Facility ID 9000389 and Release ID NCE, to track the discovered contamination from an unknown source.

In evaluating the neighborhood at large, the DERR determined that two historic petroleum release sites, and another property with aboveground storage tanks (ASTs) but no release history, were upgradient to the affected home. The DERR was aware of the former Naples Truck Stop site (Facility ID 9000333 Release ID JIG), and the Western Petroleum site (Facility ID 9000171 Release ID LWP and KMX). The site with no release history was the Brenntag Pacific property.

The Naples Truck Stop release, 1993, had an AST piping problem with up to 8,000 gallons of gasoline lost. The release was managed by the Region 8 Environmental Protection Agency (EPA), with the EPA investigating, then treating



Impacted Home November 2013 and Sampling Holes



Petroleum Contamination Evident in Subgrade Soils and Groundwater at Impacted Home

~ continued on page 6

~ continued from page 5

the plume with groundwater recovery and vapor removal techniques. By 1996, the EPA's treatment goal was met, with impacted groundwater reaching total petroleum hydrocarbon (TPH) levels of less than 10 mg/L. In September 2001, the EPA formally left the project, and the DERR oversaw the case until transfer to the Division of Water Quality (DWQ), 2004, under intra-division agreement. At the time of project transfer to DWQ, the DERR understood the release to be under control.

The Western Petroleum site had a petroleum release attributed to an underground storage tank (UST) system. Release ID KMX, 1998, is managed by the DERR, with some source soils being removed, but affected groundwater is still being monitored through site closure. In the area of the UST spill, was Release ID LWP, 2004, and attributed to an AST system. The spill was first managed by the DERR, then transferred to the DWQ in 2008, under request by the site owners. The co-mingled releases contained a mix of gasoline and diesel constituents, and were located near the northern portion of the property. The DERR concluded that the known petroleum releases, 'KMX and LWP', at the Western Petroleum site were under control.

On November 26, 2013, the DERR inspected the ASTs at the Brenntag Pacific property. The inspection confirmed that no diesel or gasoline was contained in the ASTs, rather, down-hole lubricants, methanol and ethylene-glycol used in the oil field business.

By January 2014, the DERR declared that a direct and immediate threat to human health existed in the neighborhood, and initiated a subsurface investigation using the DERR's LUST Trust fund to explore an unknown source of petroleum. The DERR's investigation, January 14-17, 2014, consisted of 31 direct-push borings across an approximate four-block area, with soil and groundwater samples collected and analyzed. The discovered petroleum plume was approximately 1,200 feet long and about 250 feet wide. The plume appeared to emit from the southeast quadrant of the Western Petroleum site, extending to the impacted home being built and other residences.

In March 2014, the DERR determined that the Naples plume source was likely the Western Petroleum facility, and worked with the DWQ and the Utah Attorney General's Office (AGO), for transfer of the case file to the DWQ, due to the AST regulations of the time. The DWQ then issued a Notice of Violation to Western Petroleum, for unauthorized discharges to groundwater. In August 2014, Pilot Corporation (Pilot), who acquired the Western Petroleum facility, conducted an on-site study of a gasoline line leak that the former owners discovered and repaired in February 2013. Pilot's report indicated that the 2013 line-leak was not the source of offsite contamination investigated by the DERR.



Dissolved phase benzene map, in ug/L, from the DERR 2014 Investigation



Direct-push sampling operations during the DERR 2014 Investigation

One year later, following Pilot's inaction to evaluate off-site impacts from their property, the DERR determines that additional studies of occupied homes at the head of the plume were warranted. In coordination with the DWQ and the AGO, the DERR setup work that would evaluate the potential for petroleum vapor intrusion into several homes.

~ continued on page 7

~ continued from page 6

In February 2015, the DERR utilized the Hazardous Substance Mitigation Act (HSMA) fund to evaluate the indoor air space of an occupied manufactured-home, and the sub-slab airspace beneath the basement of another. The analyses of indoor air in the manufactured home showed no petroleum impacts, but the monitoring of sub-slab air of the second home, from March 2015 through July 2016, showed the presence of chemicals of concern, but they were below action levels. The DERR concluded that there was a low risk for vapor intrusion into both homes.



Sampling Ambient Air Beneath the Manufactured Home



Installing Sub-slab Vapor Monitoring Point



Sampling Sub-slab Vapor Monitoring Point

By January 2017, the DERR, DWQ and AGO decided that the DERR would cease using the HSMA fund and working on the case, and that DWQ would move forward with enforcement actions to get the responsible party (RP) to fully investigate its petroleum release. To date, the impacted home under construction was never finished, the petroleum plume continues to exist, and the DWQ, AGO and RP continue work to resolve this matter.



Sampling Near Head of Plume



Soil Core Near Presumed Source Area

What's Wrong in this Picture? by DeAnn Rasmussen



Within the total containment sump, crossover-tubes (jumpers) and test gauges need to be removed.

Important Dates to Remember

1. Throughput forms are mailed out around March 15th.
2. Throughput forms are due by April 30th.
3. Annual tank registration and PST Fund fee invoices are mailed around May 15th and the payment deadline for these fees is July 1st.
4. Any facility that has not paid the annual fees by September 1st will lose PST Fund coverage and the Certificate of Compliance will lapse.
5. Certificates of Compliance are mailed around the 15th of December.
6. The Secondary Containment Tests to qualify for the rebate must be received by December 15th.

DERR Updates

Position Changes

Lincoln Grevengoed, CERCLA, New Hire as an Environmental Scientist, January 2021

Kim Shelley Appointed by Governor-elect Cox, as the Executive Director of DEQ, January 2021

Doug Hansen, DERR UST Compliance Section Manager, leaves DERR to become Director of the Division of Waste Management and Radiation Control, May 2021

Morgan Atkinson, DERR LUST RA Section Manager, leaves position to become the DERR UST Compliance Section Manager, June 2021

Avery Holyoak, Environmental Engineer, leaves position to becomes DERR LUST RA Section Manager, August 2021

Linda Gould, Returns to DERR from DWQ to become CERCLA Support Staff Member, August 2021

Certification Corner

EXAMS for A/B Operators, Groundwater and Soil Samplers, UST Removers, UST Installers, UST Technicians, UST Testers and UST Consultants

Testing Location: Utah DEQ/DERR office at 195 North 1950 West, Salt Lake City, Utah.

Testing Times: DERR is testing on Tuesday, by appointment only, and offered by Chelsea Qualls, as availability occurs.

Applications, supporting documents and fees must be submitted 5 business days prior to taking the exam, preferably sent via email to Chelsea Qualls.

You can pay fees online: <https://deq.utah.gov/certification/derr-payment-portal-shopping-cart>

If you are not sure that you have submitted an application, contact Chelsea, she would be happy to check for you. Please contact Chelsea Qualls at cqualls@utah.gov or 801-536-4100.

The complimentary extensions provided during the pandemic are ending July 1st. If you have been receiving the extensions, we encourage you to book an exam soon, if you have not already done so.

Certified UST Consultant Recertification Changes

Regarding the Certified UST Consultant course: the DERR is providing an online Google Meet version of the Consultant Course at this time during the pandemic. You can expect the regular course, you know and love, to return once we get back to normal.