

# UTAH TANK NEWS

Summer  
2015

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## Secondary Containment Requirements For PST Fund Rebates by Doug Hansen

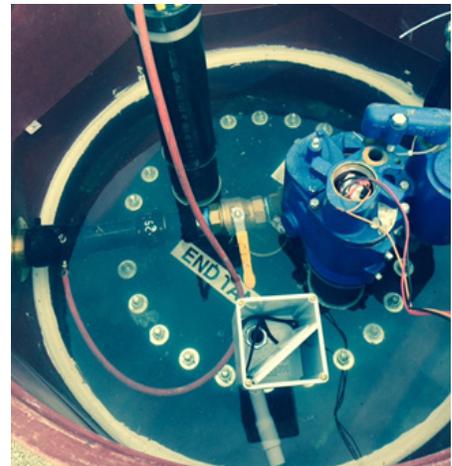
The risk profile for each facility that participates on the Utah Petroleum Storage Tank (PST) Trust Fund is calculated on December 15<sup>th</sup> for the following calendar year. This risk number is used to determine the eligible PST Fund rebate for that facility for the following year. Facilities with secondary containment on underground storage tank (UST) systems have lower risk. Lower risk corresponds to a higher PST fund rebate. In order to receive credit for containment equipment, the equipment must function properly. Below is a description of what needs to be done for tanks, piping and containment to qualify as lower risk. In addition, **Table 1** (page 3) provides a summary of secondary containment requirements.

### Tanks

To qualify as contained, the tanks must be double-walled and either:

- Use continuous interstitial (the space between the inner and outer tank) monitoring for leak detection, or
- Pass an accepted integrity test of the interstitial space every three years.

Continuous interstitial monitoring (CIM) for tanks systems in Utah is most often accomplished by having a sensor in a dry interstitial space or through use of a brine filled interstice. When a sensor is used in a dry interstice, it sends a signal to the automatic tank gauge (ATG) console where results are recorded to document no liquid is in the space. For brine filled tanks, a saltwater solution is placed in the interstitial space. The level of the solution is then monitored either electronically or manually. An increase or decrease in the saltwater level indicates a leak in either the inner or outer tank.



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Two less common methods of CIM involve placing pressure or vacuum on the interstitial space. A gauge is used to monitor for changes in pressure or vacuum to indicate failure of the inner or outer tank. Monthly records are required to document that continuous interstitial monitoring is being properly conducted.

For double-walled tanks not using CIM, the interstitial space must be tested once every three years to document integrity. This integrity test must be performed by a Utah Certified UST Tester in order to be valid. The Certified Tester will help to determine the appropriate integrity test for the tank. If the tank is double-walled and is not using CIM for leak detection, this integrity test must be submitted to the State prior to December 15, 2015 to receive credit as secondarily contained for 2016.

### **Piping**

For piping to qualify as secondarily contained it must be double-walled and either:

- Use vacuum, pressure or liquid-filled interstice for continuous leak detection, or
- Use monitored sumps for leak detection and conduct an integrity test of the piping interstitial space at least once every three years.

Currently no piping in the State uses vacuum, pressure, or liquid-filled interstice to perform continuous monitoring of the piping interstice. With the vacuum or pressure methods, the space between the inner and outer pipe is placed under pressure or vacuum. A sensor monitors for changes in pressure to indicate a leak in the pipe. Similarly, with liquid-filled interstice the space is filled with liquid. Any change in the liquid level indicates a possible leak. Double-walled piping that uses one of these three continuous monitoring methods qualifies as secondarily contained.

Most piping interstitial monitoring makes use of sumps (or containment) at the top of the tank and under the dispensers. The piping is placed so that any leak from the inner pipe will drain through the outer pipe and collect in the dispenser containment or tank top sump. In order to make sure that the outer pipe doesn't leak and it will carry the fuel into the sump, it must be tested every three years to verify its integrity. Double-walled piping using sumps for monitoring that has been integrity tested within the last three years, qualifies as secondarily contained for the purpose of determining PST Fund rebates.

Any piping that is not continuously monitored or monitored using sumps will not qualify as secondarily contained- *even if it is double-walled and is integrity tested.*

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**Sumps and Containment**

“Sumps” and “containment” are terms that refer to equipment used to contain product that is released from tanks and piping. Tank top sumps are located on top of the UST where the piping or sub-pump exits the tank. Under dispenser containment (UDC) is located under the dispenser. After October 2008 all new tank and piping installations are required to include tank top sumps and UDC as part of the secondarily contained piping. Prior to that date, they were still commonly installed as part of an interstitial monitoring system for double-walled piping. However, tank top sumps and UDC may also be installed on single-walled piping or double-walled piping where another method of leak detection is used. Regardless of why they were installed, these forms of containment have been shown to be very effective at reducing product releases to the environment.

To receive credit as containment for purposes of the PST Fund rebate, sumps and containment must:

- Be double walled with continuous monitoring of the interstitial space, or
- Pass an integrity test at least once every three years.

Continuous monitoring may be accomplished by:

- Monitoring the interstice with a liquid sensor,
- Applying vacuum or pressure to the interstice and monitoring with a pressure sensor, or
- Filling the interstice with liquid and either manually or electronically monitoring for changes in liquid levels.

Any sump or containment not monitored continuously by one of the methods listed above must be tested for integrity at least once every three years to be considered secondary containment.

**Table 1: Summary of secondary containment options and requirements for PST Fund rebate program. These requirements are in addition to leak detection and testing requirements for compliance with UST regulations**

Equipment	Construction	Options
Tanks	Double-Walled	Continuously monitor between walls (using a sensor, pressure, vacuum, or liquid)
		OR Integrity test every 3 years
Piping	Double-Walled	Continuously monitor between walls (using pressure, vacuum, or liquid)
		OR Conduct a piping integrity test of interstice every 3 years in conjunction with interstitial monitoring
Sumps/ Containment	Single-Walled	Integrity test every 3 years
	Double-Walled	Continuously monitor between walls (using a sensor, pressure, vacuum, or liquid)
		OR Integrity test every 3 years

## Utah UST Tools Help Owners Attain Compliance by Jason Wilde

Compliance is hard! As owners or operators of Underground Storage Tanks (USTs), you know all too well how challenging rules and regulations in that field can be. It is difficult to know which rules apply to your specific system. It takes hard work to know when you fall out of compliance. It is confusing when the rules change requiring different results, new forms, and inspections. Oh, and lets not mention the stress of those dreaded State or County inspections. These struggles make operating USTs in the State of Utah challenging. Well, there are many tools that the State's UST program provides that help with these challenges. Many of them have been available for years and have helped a great number of facilities stay operating efficiently and safely. Newer tools like the UST Priority Assessment, fee rebates and zero interest rate loans are quite powerful and owners and operators alike need to be aware of their merits. The following paragraphs outline these new tools and describe why their use will ease many compliance challenges and help us all better protect health and the environment.

Each UST facility is different. Whether you are a high volume truck stop in downtown Salt Lake City or a single-bay mechanic shop with a waste oil tank in Ivins, all UST facilities must adhere to the same state and federal UST laws. Treating all facilities alike rarely makes sense so the UST program uses a prioritization tool that ranks each facility by how risky a release could be. Depending on the quality of the tank system and the sensitivity of its surroundings, facilities are prioritized by their risk of affecting public health and the environment. The prioritization is available to the public at [http://eqedocs.utah.gov/P\\_APSearch.aspx](http://eqedocs.utah.gov/P_APSearch.aspx).

UST facilities should pay their fair share. Most owners in Utah use the Underground Petroleum Storage Tank Trust (PST) Fund for financial assurance. The Fund gets most of its money through a surcharge that assesses at 13/20 cent per gallon sold. Rebates of that surcharge are now available for up to 40% depending on a facility's assessed risk factors. This graduated approach ensures money is available to everyone who participates in the PST Fund. This shifts the financial burden away from participants that are less likely to use PST Funds while ensuring those more likely to use them, pay higher surcharges. These higher costs should encourage owners and operators to upgrade as their systems become outdated.

Use the PST Loan program to fund upgrades and take advantage of the 0% interest. Loans may be used to upgrade or replace components of your facility (sumps, leak detection, containment, etc.), the entire system, or to permanently close a facility. Loans can be made for up to 80% of the cost of work, up to \$150,000 per facility or \$50,000 per tank (for one or 2 tanks). This is an incredible way to decrease risks at your facility. Details are available at <http://www.deq.utah.gov/FeesGrants/loans/pstloan/index.htm>.

As we have seen, UST compliance is not as simple as it seems. There are specific challenges that owners face, some more so than others. To make things fair, Utah's UST program provides tools that address facilities on a case-by-case basis, ranking them by their potential impact on the environment and then providing cost effective options to help them achieve and maintain compliance. Features like the UST Prioritization Tool, the Environmental Assurance Fee Rebate, combine with Utah's no-interest PST Loan Fund help owners achieve and maintain compliance and, as can be seen throughout the state, can be a part of the systematic, long-term strategy for maintaining compliance.

### INVEST IN YOUR FACILITY WITH A 0% INTEREST LOAN

- Available for Upgrades
- Available for Removals
- Covers 80% of cost
- \$150,000 per facility or
- \$50,000 per tank

# 5 THINGS TO KNOW ABOUT VAPOR RECOVERY

by Gary Harris

The Underground Storage Tank Section has been collecting data about vapor recovery systems at UST facilities during UST Compliance Inspections. UST inspectors have talked with many owners about these requirements. The Utah Division of Air Quality (DAQ) provides oversight for the release of gasoline vapors to the atmosphere, at all gas stations and private fueling sites (fueling facilities) within the State.

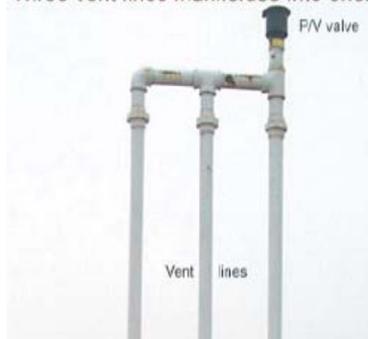
## *5 Things You Need to Know About Stage 1 Vapor Recovery*

- Vapor Recovery requirements were implemented statewide April 30, 2011.
- Vapor Recovery is not required for diesel tanks.
- Requirements differ depending on throughput of gasoline; 250 gallons, 10,000 gallons or 100,000 gallons in any month.
- Basic Vapor Recovery includes:
  - Either 2 point vapor recovery or coaxial vapor recovery
  - Pressurized vent caps
  - Properly placed drop tubes
- DAQ may issue penalties to facilities not in compliance with vapor recovery.

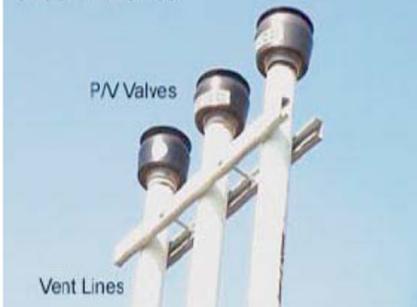
**Coming Soon!!** A detailed fact sheet titled “Department of Air Quality Vapor Recovery” can be found through our website at <http://undergroundtanks.utah.gov/>.



Three vent lines manifolded into one.



Three unmanifolded vent lines with three P/V Valves.



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## Certification Corner

### **TESTS for A/B Operators, GW/Soil Samplers, ETC**

Testing will be conducted each month on the first Tuesday at 9:00 a.m. and the third Tuesday at 2:00 p.m. at the DEQ/DERR office located at 195 North 1950 West, Salt Lake City. All students must register with the DERR at least one week prior to taking the exam. Please contact Michelle Horning at [mhorning@utah.gov](mailto:mhorning@utah.gov) to register.

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### **CERTIFIED UST CONSULTANT ~ Initial Exam and Renewal Course Schedule**

The renewal course will begin promptly at 9 a.m. and finish at 1:00 p.m. The comprehensive exam will begin at 2:00 p.m. The next date for this exam is Thursday, October 15, 2015. If you have any questions, please contact Michelle Horning at [mhorning@utah.gov](mailto:mhorning@utah.gov).

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**GOOD NEWS!!** You can now submit initial UST certification and operator applications, documentations, and payments online here: <https://secure.utah.gov/storagetank>