2016 Tank Tips

January 2016, Tank Tip, New Federal Rules for Overfill Prevention Equipment:

New Federal Rules for Overfill Prevention Equipment

New Federal underground storage tank (UST) rules require inspection of all overfill prevention equipment by October 13, 2018 and every three years after. The inspection must:

- Verify that overfill prevention equipment is set and activates at the correct level,
- Follow the manufacturer's recommendation or a code of practice developed by a nationally recognized association or independent testing laboratory, and
- Be documented with records kept for three years.

Ball floats may not be installed as overfill prevention on new tank systems. Existing ball floats that fail the inspection must be replaced with another form of overfill prevention.

February 2016, Tank Tip, New Federal Rules for Automatic Tank Gauge Equipment:

New Federal Rules for Automatic Tank Gauge Monitoring Equipment

New Federal underground storage tank (UST) rules require inspection and testing of all Automatic Tank Gauge (ATG) monitoring equipment by October 13, 2018, and every year after. The inspection must:

- Verify that all ATG electronic and mechanical components including sensors and probes, are tested for proper operation,
- Verify that the ATG has been properly programmed,
- Follow manufacturer's recommendation or a code of practice developed by a nationally recognized association or independent testing laboratory, and
- Be documented with records kept for one year.

If you use electronic line leak detectors for monthly leak detection, ensure the ATG system is properly programmed.

March 2016, Tank Tip, Requirements for Spills and Overfills:

Response Requirements for Spills and Overfills

Overfills and spills occur at facilities when fuel is delivered to tanks or when vehicles are being fueled. Asphalt, concrete, soil, surface water and storm drains can be impacted by fuel and an owner or operator is required by law to do the following for a spill and overfill:
For Spills greater than 25 gallons:

- Notify the local Fire Department and Health Department immediately and contain the spill and initiate cleanup,

- Prevent additional releases from occurring and identify and reduce any potential for fire, explosion and vapor hazards,

- Notify DERR within 24 hours.

For any spill that causes a sheen on surface water; contain the spill to prevent addition fuel from entering the water and notify the local Fire Department, Health Department and DERR immediately.

For spills less than 25 gallons, immediately contain and clean up then document the response.

For spills less than 25 gallons that cannot be contained and cleaned within 24 hours, notify the DERR.

April 2016, Tank Tip, Throughput Form:

Petroleum Storage Tank Trust Fund (PST Fund)
Annual Facility Throughput Declaration Form

Annual throughput declaration forms for facilities participating in the PST Fund were mailed on March 18, 2016. The PST Fund fees for Fiscal Year 2017 are based on total throughput (the amount of fuel sold per facility) during January 2015 through December 2015.

- If you didn't receive a throughput form for a PST Fund covered facility, you may request a duplicate form at 801 536-4100.

- If you received a PST Fund throughput form, complete it and return it to the DERR by April 30, 2016.

- If the completed throughput form is not received by April 30, 2016, the facility will automatically be charged the higher PST Fund fee of $450.00 for each UST.

If you have questions about throughput declarations, call the UST Compliance Section at 801 536-4100.

May 2016, Tank Tip, Registration and PST Fund Fees:

Fiscal Year 2017 UST Registration and PST Fund Fees

Billing for the 2017 UST registration fees will be mailed around May 15, 2016. For facilities that participate in the Petroleum Storage Tank Fund, the annual PST Fee will be included in this billing. Both UST registration and PST Fund fees are due by July 1, 2016.

June 2016, Tank Tip, Fee Increase:

FEE INCREASE

During the 2016 Utah Legislative Session, changes were made to the underground storage tank (UST) registration fees. These changes go into effect on July 1, 2016 (state fiscal year 2017).

- Annual registration fees increased from $100.00 to $110.00 per tank for PST Fund facilities and from $200.00 to $220.00 for tanks not participating in the PST Fund.

- A new tank installation permit fee of $500.00 and an additional $200.00 per tank fee assessed in areas where State inspectors conduct the installation inspection.

See the upcoming Summer 2016 UST Newsletter for additional information on the fee increases.

July 2016, Tank Tip, Diesel Corrosion:

DIESEL CORROSION IDENTIFIED IN STEEL AND FIBERGLASS USTS

The Environmental Protection Agency (EPA) has recently conducted research on a small number of diesel USTs across the United States. The research has identified moderate to severe corrosion inside the majority of the USTs that participated in the research. Use the following link to access the report: https://www.epa.gov/sites/production/files/2016-07/documents/notice-dieseltanks-corrosion-7-14-16_0.pdf.

August 2016, No Tank Tip.

September 2016, Tank Tip, ICCP Systems:

Steel tanks, piping and piping flex connectors all need to be protected from corrosion. One method to protect steel in the ground is an impressed current cathodic protection (ICCP) system. Many ICCP systems in Utah were installed more than 20 years ago. An ICCP

system uses a rectifier and anodes buried near the steel part of the tank system to prevent the tank system from corroding. Recently, the DERR has been notified that some of these ICCP systems have stopped working or are not providing enough protection for the tank system. In most cases, the 20 plus year old anodes were failing.

The DERR recommends when tank owners perform their monthly B operator inspection, that they carefully ensure:
- The rectifier is still working,
- The readings for current (amps) or voltage have not changed. Small changes to the amps or volts are generally acceptable but larger changes may indicate a problem.

If you notice a problem, contact your cathodic protection tester. A steel tank without proper corrosion protection can lead to a petroleum release.

October 2016, Tank Tip, Proposed Changes to R311:

Proposed Changes to R311, Utah Underground Storage Tank Rules.

The Division of Environmental Response and Remediation (DERR) is proposing amendments to the Utah Underground Storage Tank (UST) rules to incorporate by reference new Federal UST regulations that became effective on October 13, 2015, make changes to the Utah rules to administer the Federal regulations, simplify the Utah rules, and remove rule wording that is redundant or no longer applies.

TheDERR web site, http://www.deq.utah.gov/Divisions/derr/branches/ust/proposedR311.htm, has a summary of the proposed changes and links to a downloadable document that contains the text of the changes, the new Federal UST regulations, a revised monthly operator inspection form, and other related documents.

On September 8, 2016, the Utah Waste Management and Radiation Control Board approved the proposed rule changes for publication and public comment. The public comment period begins on October 1, 2016, and ends on October 31, 2016. The DERR web site has information on the public hearing that will be held to receive comments, and contains instructions for submitting comments in writing or by email. If you have questions concerning the proposed changes, please contact Gary Astin at (801) 536-4103 or gastin@utah.gov, or Doug Hansen at (801) 536-4454 or djhansen@utah.gov.

November 2016, Tank Tip, Preparing for Winter:

WINTER CAN IMPACT YOUR USTs

Winter weather can impact UST equipment. Equipment that may not be in good condition may create problems.

- Electrical wire connectors for sump sensors, probes and electric leak detectors, that are not sealed properly, may accumulate moisture or water and can freeze. Frozen wire connectors that are not properly sealed can fail and reduce profits.

- Metal inner riser caps are made from pot metal and corrode against a steel riser, allowing water to enter a UST. Inspect your inner riser caps and physically grasp the inner cap, whether pot metal, steel or plastic and ensure the cap is water tight.

- Probe wires entering an inner riser cap should be water tight.

- Continuous freeze and thaw of water may impact containment sumps, sensors and the product piping. If the latter is double wall piping, water may enter the piping interstice and freeze creating stress on the piping.

- Ensure all removable inner caps for fuel delivery risers and Stage One Vapor Recovery risers, are secure, not broken and have a water tight gasket.

- Ensure that your fuel filters are ethanol compatible to reduce water being pumped into a customer's vehicle.

Repairs to UST systems made before winter take less time and are easier to complete which can relate to less money spent.

2015 Tank Tips:

January 2015, Tank Tip, Class A&B Operator Renewal Registration:

Many class A and class B operators need to renew their registration with the Division of Environmental Response and Remediation (DERR) before January 1, 2015. Check your expiration date to make sure. Two things are required for the renewal process:

1. Complete the application form
2. Pay the $50 renewal fee.

The application form can be found at: http://www.deq.utah.gov/ProgramsServices/programs/tanks/ust/training/docs/2014/08Aug/OperatorTrainingApp.pdf

The application and fee can be mailed to:
DERR
PO Box 144840
Salt Lake City, Utah 84114-4840.

You may also bring the application and fee to our office at:

195 North 1950 West
Salt Lake City, Utah.

If paying in person, please have exact change or pay with a check because we are unable to accept credit card payments at this time.

February 2015, Tank Tip, New Monthly Inspection Form:

NEW MONTHLY INSPECTION FORM

Class B operators must ensure UST systems are inspected every 30 days. The monthly inspection form was simplified and adopted for use beginning JANUARY 2015.

- The new inspection form can be found at: http://deq.utah.gov/forms/enviroresponse/docs/2009/05May/USTOperatorInspection.pdf

- Instructions for completing the form can be found at: http://www.deq.utah.gov/ProgramsServices/programs/tanks/ust/training/docs/Monthly/OperatorInspectionInstructions.pdf

Inspect your site monthly and monitor your UST system. Besides being the law, it's one important way to reduce your risk of an expensive petroleum cleanup.

March 2015, Tank Tip, Stage 1 Vapor Recovery:

USTs and the Utah Division of Air Quality

The Utah Division of Air Quality (DAQ) administers the Stage 1 vapor recovery program for gasoline USTs. Under that program, fines can be levied for missing or non-functional equipment. Vapor recovery equipment includes:

- Pressure vent caps installed on gasoline USTs vent lines,
- Functional poppets on 2-point vapor recovery systems, and
- Co-axial drop tubes on single point vapor recovery systems,

Gasoline vapors can also escape through damaged or broken UST riser caps for tank probes or any other tank top fitting that is loose.

Stage 1 vapor recovery requirements vary depending on the monthly throughput at the facility, if you have questions on specific requirements for your facility, call Susan Weisenberg of the Utah DAQ at 801 536-4045.

April 2015, Tank Tip, Throughput Declaration Form:

Petroleum Storage Tank Trust Fund (PST Fund)
Annual Facility Throughput Declaration Form

The annual throughput declaration form for facilities participating in the PST Fund, was mailed on March 16, 2015. The PST Fund fees for Fiscal Year 2016 are based on your total throughput (the amount of fuel you sold per facility) during January 2014 through December 2014.

- If your PST Fund insured facility did not receive a throughput form, call us at 801 536-4100.
- If you received your PST Fund throughput form, then complete and return the form to the DERR by April 30, 2015.
- If your completed throughput form is not received by the DERR by April 30, 2015, your facility will automatically be charged the higher PST Fund fee, of $450.00 for each UST.
- Questions? Call your DERR project manager at 801 536-4100.

May 2015, Tank Tip, Increase In Compliance Rate/Thank You:

Since January 2012, UST compliance rates, at the time of inspection, have increased from 75% to 87%. This increase is largely due to two factors. First, your response to the operator training requirement increased compliance by about 8%. Second, your response to the reminders of periodic tests (line leak detection and cathodic protection) coming due increased the compliance rate another 4%. Neither one of these efforts would be effective without the support of the UST community. The UST Compliance section extends a hearty "THANK YOU!!!" too all those who have made these two efforts a huge success.

June 2015, Tank Tip, Summer Tank News, 2016 Rebates:

2016 PETROLEUM STORAGE TANK (PST) FUND REBATES

Are you planning to get the same PST Fund rebate in 2016 as you did this year? Testing of your UST system components may be required. Read the upcoming summer Utah Tank News for 2016 rebate testing requirements. If required, passing test results must be received by the DERR before December 15, 2015, to receive credit for next year.

Did you know that containment sumps have to be filled with water to be tested? Winter is not the ideal time to test or repair a containment sump. Schedule your testing NOW, while Utah Certified Testers can make the time and have good weather to test your equipment.

July 2015, Tank Tip, Federal Regulations:

New Federal Regulations for Underground Storage Tanks

The final federal UST regulations are now available and will be published in the Federal Register within the next few weeks. The rules can be viewed

at: www.epa.gov/oust/fedlaws/revregs.html. Click on the link entitled Prepublication version of the final UST regulations (PDF).

August 2015, Proposed Fee Charge for Removing and Installing USTs:

For over 13 years, the Utah UST program has been able to continue providing services without raising the annual tank registration fees. With the increased cost of doing business coupled with a reduction in federal funding, the amount of work subsidized out of the Petroleum Storage Tank (PST) Fund has increased. In order to protect the balance of the PST Fund, the Division is proposing to assess fees for the installation and closure of USTs. By targeting these specific services, the Division can avoid a general increase in the annual UST registration fee to all owners. The complete background and explanation for the proposed fees can be viewed at: http://www.undergroundtanks.utah.gov/docs/2015/08Aug/FeeProposalSummary.pdf

Information about the fee hearing and submitting a written comment can be found at: http://www.utah.gov/pmn/files/172919.pdf

If you have questions, please contact your UST project manager at 801 536-4100.

September 2015, Proper UST Installation:

When underground tanks are installed, the DERR requires that certified UST installers:

- Follow the UST manufactures installation instructions,
- Follow an installation code of practice such as Petroleum Equipment Institute (PEI) RP100, and
- Complete and submit the manufacturer's installation checklist.

If the installer deviates from these requirements, the DERR may require written approval from the manufacturer before issuing a certificate of compliance. The manufacturer's warranty for a UST system or equipment may be voided if not installed properly.

October 2015, New Federal Rules for Emergency Generators:

On July 14, 2015, new federal underground storage tank (UST) rules were published. One of the changes to the federal rules requires leak detection on all emergency generator USTs and their product piping. Utah will need to adopt leak detection requirements for emergency generators by October 13, 2018. A summary of leak detection requirements for emergency generators follows.

USTs installed ***prior*** to October 1, 2008

-USTs must pass a monthly leak test,
-Pressurized product piping monitored by automatic line leak detector and must pass an annual tightness test

-U.S. Suction product piping must have monthly leak detection or pass a tightness test every three years
-Safe Suction product piping is not subject to release detection requirements

USTs installed ***after*** October 1, 2008

-USTs must be double-walled and interstitially monitored
-Pressurized piping must be double-walled, interstitially monitored, and have automatic line leak detection
-All suction piping must be double-walled and U.S. Suction must also be interstitially monitored

Watch for more detailed information about leak detection methods and other rule changes in upcoming newsletters and tank tips.

November 2015, New Federal Rules for Spill Buckets:

New Federal Rules for Spill Buckets

New federal underground storage tank (UST) rules will require spill buckets to be tested by October 13, 2018, and every three years thereafter.

- Spill buckets must be tested for leaks by hydrostatic testing (filling with water) or by applying a vacuum to measure a leak rate.

- Double-walled spill buckets with a gauge that monitors the integrity of both walls do not need to test, if the Class B operator inspects them every 30 days and records the inspection.

- The test or inspection must follow the manufacturer's recommendation or a code of practice developed by a nationally recognized association or an independent testing laboratory.

Record Keeping:

- Test records for spill buckets are required to be kept for 3 years.

- Inspection records for monitored, double-walled spill buckets are kept for the life of the equipment. Records must show that the spill bucket is double-walled and it has been inspected monthly.

December 2015 Tank Tip Sent Was Sent and Labeled as January 4, 2016, Tank Tip

2014 Tank Tips:

January 2014, Tank Tip, Correct Notification Form:

Beginning January 2014, a reminder will be sent to all facilities with line leak detection and cathodic protection tests that are due or will soon be due to be re-tested. For most of, you this will simply require submitting the most recent test results so we can update the record. For those that need to have the tests conducted, submit the results upon completion of the required tests. The goal of this effort is to provide a reminder for operators to schedule testing before it is due and reduce the number of operators required to undergo retraining.

February 2014, Tank Tip, Correct Form for Work Performed on a UST:

Using the correct form for UST removal, installation, or notification will save you time (and money). Periodically the DERR streamlines or updates processes by editing existing forms

- DERR web page lists the most current UST notification forms http://www.undergroundtanks.utah.gov/ust_forms.htm
- The most recent form updated is the UST Closure Plan, July 2013
- For questions about current forms, please contact the UST compliance section at 801-536-4100

March 2014, Tank Tip, Throughput Form:

The annual petroleum product throughput declaration form is mailed to Petroleum Storage Tank (PST) Fund participants in March each year. This form provides tank operators the opportunity to declare the amount of total product a facility sold the previous year. The amount of product sold determines the annual cost per tank for the PST Fund fees for that facility.

- Watch for the throughput form and instructions in the mail in the next month.
- Changes proposed this legislative session may affect how much you pay for PST Fund fees.
- Failure to return the completed throughput form may result in assessment of higher annual PST Fund fees.

April 2014, Tank Tip, Change In PST Fees and Through-Put Form:

LEGISLATION WAS PASSED THIS MONTH THAT MAY AFFECT HOW MUCH YOU PAY FOR ANNUAL PST FUND FEES

House Bill 138 states:

-any facility that does not submit a throughput form by the date required will be subject to a PST Fund assessment of $450.00 per tank,

-any facility with a throughput volume of 70,000 gallons or less per year will also pay $450.00 per tank,

-any facility with a throughput volume greater than 70,000 gallons per year will be assessed $150.00 per tank, and

-HIGH THROUGH PUT FACILITIES MUST DECLARE ACTUAL THROUGHPUT VOLUME TO RECEIVE THE LOWER RATE OF $150.00.

WATCH FOR THE THROUGHPUT FORM IN THE MAIL AND RETURN IT PROMPTLY

May 2014, Tank Tip, Change To Compartment UST Fees For All Tank Owners:

House Bill 138, which passed this legislative session, modified rules relating to annual registration fees for underground storage tanks (USTs) for all tank owners and Petroleum Storage Tank (PST) Fund fees for those who participate in the Fund.

- Starting July 1, 2014, compartmented tanks (including siphoned tanks) will be charged an annual registration fee and annual PST Fund Fee (if they are on the PST Fund) for each compartment.
- Registration fees remain $100 for tanks on the Fund and $200 per tank for non-participants.
- Annual PST Fund fees were outlined in the April Tank Tip. http://www.undergroundtanks.utah.gov/docs/2014/03Mar/CombinedTankTips.pdf
- Watch for more information in future Tank Tips and in the upcoming "*Utah Tank News"* newsletter.

June 2014, Tank Tip, Through-Put Fee Increase & Initial Discussion About Rebate:

Last month's Tank Tip discussed how House Bill 138 changed requirements for Underground Storage Tanks (USTs). Changes for PST Fund covered tanks include:

- The PST Fund throughput fee will increase from a half (1/2) cent per gallon to thirteen-twentieths (13/20) of a cent per gallon. This change is effective January 1, 2015.
- Starting January 1, 2015, some PST Funded facilities will be eligible for rebates of a portion of the throughput fee.
- The amount of the rebate will depend on risk factors including secondary containment as well as the type and age of the UST equipment.
- More information on rebates will be provided in future Tank Tips and in the upcoming "*Utah Tank News*" newsletter.

July 2014, Tank Tip, Request for Comments Draft Rule Changes:

The Utah UST program is developing rules in response to House Bill 138 passed during the 2014 legislative session. The DERR is seeking tank stakeholders' input on draft rule changes during an informal stakeholder comment period.

- The draft changes can be found here: http://www.environmentalresponse.utah.gov/docs/2014/06Jun/DraftUSTRules.pdf
- Comments will be accepted through July 31, 2014 at ustcomments@utah.gov
- After a final draft is completed, a formal comment period will also be held later this year.

August 2014, Tank Tip, Request for Comments Draft Rule Changes:

June's Tank Tip discussed PST Fund rebates for qualified facilities. The risk value for each facility will be determined based on the equipment at that facility. The following link allows you to see the current risk value of a facility and project the impact of upgrading UST system components: http://eqedocs.utah.gov/P_AssSearch.aspx

- Find the facility by the 7 digit facility ID number, owner or facility name, or address
- Click on Details and read (then close) the UST Priority Assessment Disclaimer,
- The section labeled "Likelihood Assessment" provides the rebate risk value,
- The number listed next to "Current", represents a facility's risk value based on the current UST system,
- Under "Criteria", the type of UST equipment can be changed and a new risk value calculated. Lower risk values qualify for larger rebates.

If you have questions, call your DERR project manager at 801 536-4100

September 2014, Tank Tip, Shear Valve Compromised by Quick-Connect Ball Valve:

A shear valve, located under each dispenser, is designed to close and stop product flow during a fire or when a dispenser is knocked over by a vehicle. UST Owners and Operators should be aware of that:

- In order to simplify the piping test process, a quick-connect ball valve is often installed on the test port. If the quick-connect ball valve assembly extends above the shear valve, product can bypass the shear valve and continue to flow during a fire, or after the dispenser is knocked over. See picture at: http://www.environmentalresponse.utah.gov/images/Picture3.jpg
- You can contact your petroleum equipment company or a tester to remove quick-connect ball valves and accessory test piping that extend above the shear valve.
- During a fire, the shear valve is tripped when a fusible link is melted. If this link gets broken, have it replaced by a certified installer or technician.
- Never block the shear valve into the open position, or it will not function in an emergency situation.

October 2014, Tank Tip, Repair Leaking Sumps With Out Breaking Concrete:

Facilities with tank or dispenser sumps that are not water tight increase a facility's risk of a spill. This increased risk will reduce the eligible rebate of PST Fund throughput fees. Reasons that sumps fail include:

- Cracks or small holes develop on the sides or bottom of the sump
- The angle of the piping or electrical conduit entering the sump, exceeds the limits of movement for sump entry boots
- The sump entry boots are weathered, cracked or broken.

Talk with a Utah certified UST Installer or state tank program representative to discuss repair alternatives for sumps. View before and after pictures of repaired equipment
http://www.undergroundtanks.utah.gov/docs/2014/09Sep/TankTipOct.pdf

November 2014, Tank Tip, Class A&B Operator Renewal Registration:

RENEWAL OF UST CLASS A & B OPERATOR REGISTRATION

Many class A and B Operators registration will expire on or near January 1, 2015. Every UST facility is required to have a registered class A and B Operator and one person can be both the A and B. The re-registration is simple:

- All class A and B Operators can re-register 6 months before their registration expires.
- Submit a completed registration application and $50.00 to the DERR. JUST 2 ITEMS.

The following link provides the registration application: Link

December 2014, Obtaining Rebates for 2015:

PETROLEUM STORAGE TANK (PST) FUND REBATES

Qualified facilities will be eligible for rebates starting January 2015. These rebates must be claimed through the Utah Tax Commission on Form TC-116 Schedule R. Provided below is a brief overview of the rebate program.

- Rebates are based on a facility's risk value. The risk value for all facilities will be calculated annually based on several factors including, the presence of overfill protection and secondary containment, as well as the age and construction of the UST equipment.
- The risk value calculated on December 15th of each year will apply for the following calendar year. For example, the risk value calculated December 15, 2014 will apply for all of 2015.

- Secondary containment equipment is required to be tested every three years to document functionality. Any containment that fails will need to be repaired and re-tested prior to the annual evaluation date of December 15th, to receive credit as a contained system.
- To see what your facility risk level is currently and evaluate potential rebates, use this link to access the UST Priority Assessment Tool: http://eqedocs.utah.gov/P_AssSearch.aspx
- The August 2014 Tank Tip provided instructions to all owners to access the UST Priority Assessment tool, and view and adjust a facility's current risk value and potential rebate. To access the August 2014 Tank Tip use this link: a new link http://www.deq.utah.gov/Divisions/derr/branches/ust/docs/monthly/CombinedTankTips.pdf

Watch for the next issue of Utah Tank News for more details about the rebate process. If you have any questions, contact your DERR project manager at 801 536-4100.

2013 Tank Tips:

January 29, 2013, Tank Tip, Impacts of Ethanol Mixing with Water:

It is the snow and water season and operators should prevent water from entering their tanks. Water enters tanks through drain valves in spill buckets, water accumulating in spill buckets above the top of the fuel drop tube and shallow groundwater entering loose tank bungs or risers. View this http://www.undergroundtanks.utah.gov/docs/JanLink.pdf to read how water can impact your tanks and your profits.

http://www.undergroundtanks.utah.gov/docs/JanLink.pdf:

As a petroleum marketer you need to know some important facts about gasoline that contains ethanol. Ethanol mixes well with petroleum – **as long as no water exists in the system**. Any water entering your UST will strip the ethanol (which is a high octane component of your fuel) from the petroleum, and deposit it in a water/ethanol mixture on the bottom of your tank. This process is called "phase separation". With each load of fuel the percent ethanol in the water phase at the bottom of your tanks will increase, and any water that enters your tank will allow more ethanol to strip out.

As a result of this phase separation, you run the risk of either selling lower octane fuel that will cause engine performance to decrease or selling ethanol and water mixture that will cause engine failure - either way you end up with unhappy customers. In addition, if your fuel is found to be off spec by Weights and Measures, you may be required to dispose of the entire tank of product and bring in fresh product. Also, they do not allow you to dump additives (splash blending) into your USTs to restore the octane.

In addition to the potential damage to vehicles, phase separated fuel will cause corrosion of the interior of unlined steel underground tanks. Before ethanol, that initial layer of rust called a patina (ferric hydroxide and carbon from the steel) would actually help protect the underlying steel. In the presence of ethanol, this protective patina can be stripped away and leaves fresh s steel which will corrode with the introduction of water. External cathodic protection and tank

coatings do not protect tanks from internal corrosion. The three most common ways water enters into your USTs are: 1) by the drain valves on your spill buckets, 2) allowing spill buckets to accumulate water above the top of the drop tube, and 3) seepage or ground water entering through loose top bungs or risers. All of these sources of water can be easily prevented with good housekeeping practices.

If you think you're safe because you have Fiberglass Reinforced Plastic (FRP) tanks - that may not be true. Prior to the 1990 standard, FRP tanks were only designed to be exposed to up to 10% ethanol. Post 1990, most were designed to be compatible with 100% ethanol. We have received anecdotal information that some southern states have observed that in the presence of higher percentage ethanol fuels the resins in some FRP tanks dissolve leaving only the fiberglass netting resulting in major cleanups. The information is preliminary and we don't yet

know the cause of these failures, but you can decrease the chance for problems by knowing the manufacture date of your tank.

To determine phase separation in any UST you must use an ethanol compatible paste on the end of a traditional wooden measuring stick and dip the tank. Automatic tank gauge (ATG) probes which determine both water and fuel levels in your tank, cannot determine phase separation because of the changing density of phase separated ethanol, as more water mixes with the ethanol in your tank

February 2013 Tank Tip Sent 3/1/2013 Annual State Inspection Preparation:

When preparing for an inspection of an Underground Storage Tank with the State inspector, gather the following information:

- monthly site inspection check list
- monthly and annual leak test results
- cathodic protection test completed within the last three years for most steel tanks and piping

If you have any questions, please access this link to contact your project manager or call 801 536-4100.

Link=http://www.undergroundtanks.utah.gov/ust_contacts.htm# = Utah on-line map showing geographic areas managed by UST product managers

March 2013 Tank Tip Sent 4/8/2013 Safety Tip #1

The DERR is concerned about safety and provides monthly Safety Tips to UST project managers conducting inspections. Three safety tips that may be helpful during your inspections are:

1. Inspectors should be aware of all on-site auto traffic when performing inspections.
2. Never turn your back on an automobile entry zone to your gas islands or your station.
3. You are always invisible to a driver, even after they have acknowledged that they see you.

Safety tips are suggestions only and are not to be construed as required by either Utah or Federal law nor are they a guarantee that you, your employees, or contractors will be safe if the tips are followed. The State of Utah/DEQ/DERR assumes no responsibility for an individual's safety while performing monthly inspections of UST systems.

April 2013 Tank Tip Sent 4/24/13 Red Tag Removal Process

A red tag/no fuel program was started in January 2013 in order to identify tanks that are ineligible to receive fuel (see November 30, 2012 Tank Tip). Newly installed tanks are one example of tanks that would receive a red tag. Red tags should remain on new tanks until a certificate of compliance and a letter authorizing the removal of the red tag are provided by the DERR Division Director to the tank owner. Generally the approval letter can be provided within a day following submitting a complete Certificate of Compliance packet to the DERR.

May 2013 Tank Tip Sent 5/29/13 Additional Use of a Red Tag

Last month's tank tip explained that newly installed tanks are "red tagged" to prevent receiving fuel until a Certificate of Compliance is issued for the tank.

A regulated tank could also be red tagged if:

- It does not have spill/overfill prevention equipment, leak detection equipment or corrosion prevention equipment, or
- The tank's Certificate of Compliance has been revoked for noncompliance with UST requirements.

In either case, a tank is not able to receive fuel until the DERR issues written authorization to remove the red tag.

June 2013 Tank Tip Sent 6/26/13, Level B Monthly Inspection Requirements. Part 1

In January 2012, Level B operators began required monthly inspections of their tank facilities. During 2012 and into 2013 annual compliance tank inspections conducted by your State or Local Health Department inspectors, were used to educate and train Level B operators on the requirements of performing monthly inspections.

- Violations that would normally require the B Operator to retake the class and exam were handled through on-site training by the inspector.
- Going forward, these violations will require retraining by retaking the class and the examination.
- If you have questions about the monthly checklist, please get with a member of the UST compliance team, (801) 536-4100, to assist you before your next inspection.

July 2013 Tank Tip Sent 8/5/13, Level B Monthly Inspection Requirements, Part 2

June's Tank Tip discussed monthly inspections that Class B UST operators are required to conduct. For July, we want to highlight three areas of focus for the Class B operators to ensure compliance with UST requirements each month:

- Document compliance with release prevention and with release detection. http://www.undergroundtanks.utah.gov/docs/JulyTankTipLink1.pdf
- Conduct proper monthly tank inspections and properly document monthly UST operator inspections as defined in R311-206-12(h). http://www.undergroundtanks.utah.gov/docs/JulyTankTipLink2.pdf
- Document that Class C operators are both trained and registered and on-site during all operating hours.

August 2013 Tank Tip Sent 8/29/13, Water Entry and Repair Options

Common tank system issues and concerns that state inspectors see during inspections include:

- Broken or non-sealing submersible turbine pump (STP) lids,
- Broken, warped, or improperly installed sump entry boots for piping or electrical conduits,
- Cracked spill buckets.

These problems are often the source of water getting into your tank system and can result in poor quality product or even failure of your tank system. If you observe these problems, don't wait for a state inspection to take care of them. Talk with your maintenance provider or state tank program representative- often low cost repairs are available at a fraction of the cost to break concrete or asphalt and replace a sump or spill bucket.

September 2013 Tank Tip Sent 9/26/2013, Safety Tips for Inspections

Using correct equipment will increase safety during the monthly walkthrough inspection at UST facilities. Consider the following tips:

- Place waist-high cones in the work area and wear safety vests while conducting the inspection,
- Use knee pads to protect your knees and keep them dry and
- If needed, use manhole lid remover to lift heavy steel manhole covers (for examples click here- Lid Lifter)

Watch next month for tips on maintaining sump lids and other covers on your site.

October 2013 Tank Tip Sent 10/29/2013, Maintaining Sump Lids

Damaged lids, skirts and supports on submersible turbine pump (STP) sump and spill bucket lids can make monthly inspections difficult. The following tips may help:

- If the skirt has been damaged and is preventing removal of the lid, use a 48 oz. sledge hammer and a small pry bar to bend the damaged portion back from the lids.
- Snow removal equipment is often the source of damaged skirts and lids. When possible, place cones on both the STP sump lids and the spill bucket lids during snow removal to prevent damage or stockpiling of snow on top of the lids.

November 2013 Tank Tip Sent 12/3/2013, Bill Moore Retiring

Many of you know or remember Bill Moore, a Utah UST Environmental Scientist. Bill will be retiring from DERR on December 28, 2013. Bill started with Utah Division of Oil Gas and Mining in 1984, where he worked for 4 years before transferring to the Utah UST program. Bill has worked in the UST Section for 26 years and has greatly contributed to the UST program. Bill also represented DEQ on a national work group, which ensures that UST leak detection equipment is third party certified to perform per manufacture's description. Good Bye Bill and Thanks.

December 2013 Tank Tip Sent Was Sent and Labeled as 1/9/2014, Tank Tip

2012 Tank Tips:

October 12, 2012 Tank Tip, Thank You:

To help tank owners and operators become familiar with best practices and maintain compliance with UST laws and regulations, DEQ will periodically provide brief, electronic “Tank Tips” about operator training, monthly inspections, and other aspects of UST operation. The goal of this effort is to strengthen the partnership between DEQ and the UST community by assisting UST owners and operators in their efforts to reduce the risk for spills and leaks (that may impact their surrounding neighbors, disrupt their daily business and impact their monthly profits) by helping to maintain compliance with UST regulations.

In this inaugural email, rather than providing a tip, the Utah DEQ Tank Program wants to provide a hearty THANKS to All Utah Tank Owners and Operators for complying with new operator training requirements. We gratefully acknowledge your involvement in creating the training program as well as your effort in getting trained. Through your efforts, Utah leads the way in meeting the operator training requirements with a compliance rate of over 99%. Thank you and stay tuned for our next “Tank Tips” message.

October 24, 2012 Tank Tip, Notification of Repair & Install:

After the completion of a repair or an installation of a UST system (tank, piping, dispenser, sump, spill bucket, anodes, etc.) the INSTALLER is required to complete the appropriate section of the notification form for the owner and the OWNER is required to submit the form to the UDEQ within 30-days of work completion. The INSTALLER is required to ensure the notification form is submitted by the owner within 30-days or must submit separate notification within 60-days of completion.

November 30, 2012 Tank Tip, No More Tags/Red Tag:

Tank owners no longer need tags to receive deliveries of fuel. In December tank owners will receive the 2013 Certificate of Compliance in the mail, but NO TAGS WILL BE SENT FOR 2013. A red tag/ no fuel program will be used to identify tanks that do not have a certificate of compliance

December 26, 2012 Tank Tip, Notification Form:

The October Tank Tip reminded UST owners to notify DERR within 30-days after any repair to your UST system or installation of a new UST system. The DERR Notification form is available at: http://www.undergroundtanks.utah.gov/docs/notify98.pdf. The UST owner completes pages 1 and 2 and signs page 2; the certified installer completes the sections on pages 3, 4 and 5 that are relevant to the work completed and signs page 5. Contact the UST program at (801) 536-4100 if you have questions.