



# UST QUARTERLY



A Newsletter of the Kentucky Underground Storage Tank Program

Volume 5, Issue 4  
2014

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For more information, comments or story suggestions, please contact Virginia Lewis, editor of the UST Quarterly. [Virginia.Lewis@ky.gov](mailto:Virginia.Lewis@ky.gov) 502-564-5981, ext. 4024

To report a release or suspected release, call the Environmental Response Branch. 1-800-928-2380

## Owner or operator—who's responsible for UST facility compliance?

It's not uncommon for UST facility leases to state that the operator is responsible for all re-quired UST system main-tenance, testing, release detection and other rou-tine compliance activities during the term of the lease. We are finding that some owners believe such a lease provision satisfies their regulatory obligations concerning their UST systems. That is simply not the case.

Here's why—Kentucky Administrative Regula-tions Title 401, Chapter 42, like the federal regula-tions, explicitly imposes

responsibility for all com-pliance obligations upon **both** owners and opera-tors. No exemption is given for owners who have leased their UST facilities or other absentee owners who have con-tracted with a third-party (such as a designated compliance manager) for operation and oversight of the UST systems.

This comes as a shock to some owners when they find themselves the subject of an enforcement action or, worse, an ad-ministrative complaint, or lawsuit, filed by the cabi-net. In such situations, the

existence of the lease or contract will not be seen as a de-fense by the Division of Enforcement or the UST Branch and civil penalties may be sought.

Owners, make sure you keep up to date with the compliance status of your UST systems. Please read correspon-dence and call the UST Branch if you have ques-tions—help us help you. It's far better to stay on top of things now than to end up in an unpleasant situation later.



## From the Editor *UST Quarterly Delivering News Five Years*

By Virginia (Ginny) Lewis, D.C., Division of Waste Management Internal Policy Analyst

*"Useful, helpful, clear, concise, organized, positive, owner/operator centered, contractor helper"*—I wrote this note to myself while planning the first issue of the UST Quarterly. Twenty issues and five great years later, we still want readers to be able to say these words when describing this publication.

The Kentucky UST program has used this small newsletter as an outreach workhorse to deliver important news and updates to inboxes and doorsteps. Technical, administra-tive, managerial, financial, legal, and compliance staff—all help plan how each issue can best aid tank owners, operators, contractors and companies with meaningful information.

Recently, I accepted an opportunity in the Division of Waste Management's director's office where I'll be working with all the division's programs, including UST. I would like to take this opportunity to express our gratitude for your readership, feedback and hard work. Thank you kindly and let's continue the excellent work in the tanks program.

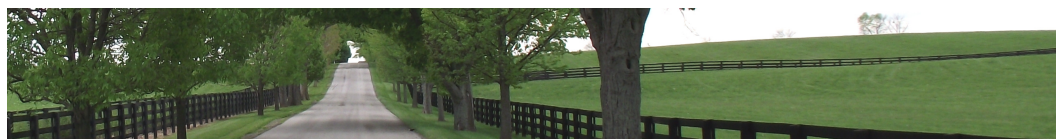


Photo by Virginia Lewis

Visit our website today at <http://waste.ky.gov/ust>.

## Why Digging Isn't Always the Answer for Quicker UST Cleanups

By Edward Winner, UST Branch Manager, and Ahad Chowdhury, P.G., UST Branch Corrective Action Supervisor



At the UST Branch, we're often asked, "Why don't you just dig it up and get it over with?" Aside from needing to have a good picture of the problem before you do anything, digging doesn't always work.

In the early days, when UST cleanups were a relatively new idea, the thought was that petroleum lost from a UST would just float on the groundwater. Contamination would be shallow and all we'd have to do is dig up the dirty soil and pump a little water.

The truth is that petroleum actually follows the path of least resistance above the groundwater and, surprisingly, below the groundwater. It finds small openings in the soil grains and between the soil grains. It travels downward in passages where roots once existed, and where rocks have shifted. It gets fairly complicated—contamination spreads both laterally and downward in paths that aren't apparent without further investigation.

Knowing that the paths petroleum may take in the ground are torturous and surprising, it becomes clear why drilling 2- and 4-inch holes in the ground, and taking samples, provides limited information. It can take years to collect enough information by examining a few soil samples or monitoring wells at a time.

As you might expect, if we have more information it's easier to understand the travels of gasoline or diesel and how best to clean them up. Fortunately, tools are available that allow the collection of more information in shorter periods of time. An example is laser induced fluorescence (LIF).

LIF works by "shining" a laser into the soil as the "drill" moves downward. The laser causes some of the components in gasoline and diesel to "glow" or fluoresce. This fluorescence can be measured and used to determine the location and relative amount of contamination present. Using LIF, a site can often be characterized in a few days.

When appropriate, the UST Branch can issue a directive that allows reimbursement for UST owners and their contractors to use LIF and other similar technologies to rapidly characterize their UST sites. This is a "win-win" scenario. It can translate into more accurate site characterization, better selection of a remedy, and quicker cleanups, freeing properties to be put back into good economic and beneficial use.

If you have questions, contact Edward Winner or Ahad Chowdhury at 502-564-5981.

### Upcoming Training Opportunity: ITRC LNAPL Course

June 3-4, 2014, Lexington, Ky.

If you want to understand what's happening in the ground when a UST leaks, you need to understand the physical properties of light non-aqueous phase liquids (LNAPLs). These petroleum hydrocarbons don't mix with water, tend to float on water in the subsurface, and are often a significant barrier to cleanup.

The Kentucky Division of Waste Management in partnership with Kentucky Petroleum Marketers Association (KPMA) is hosting an LNAPL course. Developed by the Interstate Technology Regulatory Council (ITRC) and led by internationally recognized experts, this course engages participants in hands-on problem solving exercises that are focused on real-world, site applications.

This training course is relevant for all levels of state and federal regulators, environmental consultants, and technically inclined site owners and public stakeholders.

The course fee is \$895 (with early bird fee of \$695 until April 28). This fee includes a student manual, ITRC LNAPL guidance document, and refreshments. Registrants from organizations that are members of the ITRC Industry Affiliates Program or the KPMA are eligible for a discounted registration fee.

**To view the full course description, register for the course or learn how to become a sponsor, go to ITRC's website at [www.itrcweb.org/Training#crt\\_LNAPLs](http://www.itrcweb.org/Training#crt_LNAPLs).**

## UPDATES—Kentucky TOOLS (Tank Operator Online Learning System)

### \* Personal Identification Number (PIN) Letters \*

Over the course of the next year, the UST Branch is sending letters with PINs to all owners of active or temporarily closed USTs. Your PIN allows you to access TOOLS for the first time. Once your PIN is used, it can't be used again. Subsequent visits to the TOOLS website require only your username and password. We recommend using your PIN within 30 days of receiving it. If you receive your letter and need assistance, please contact the UST Branch.

### \* Designated Compliance Manger (DCM) Certification \*

A DCM must complete TOOLS training on all the equipment installed at the UST facility for which they're the DCM. The online training may be completed in the comfort of your home, office, local library—wherever you choose. You may also go to any regional offices to train and receive assistance if needed.

A UST owner identifies who they want to train as their DCM (and yes, the owner can be the DCM), but what if you want to be a certified DCM for multiple UST facilities? In this case, we recommend taking all the TOOLS lessons (required and optional). After successfully completing all the lessons and receiving DCM certification, you are eligible to be the DCM for any Kentucky UST facility for 12 months. Recertification is required on an annual basis.

Once you (the DCM) complete TOOLS training, you may print your certificate and the compliance management plan (CMP) for each UST facility. The CMPs will always be available online, with up-to-date information, and your current certificate will be maintained in our database. You may refer to online CMPs at any time for important information about what's due at each UST facility.

### \* Upcoming Seminars on Kentucky TOOLS \*

#### May 15 (Frankfort, Ky.) and July 16 (Madisonville, Ky.)

These optional seminars are hosted by the Kentucky UST Branch and the Kentucky Petroleum Marketer's Association (KPMA). If you're interested in attending, register through KPMA's website at <http://kpma.net/Events.aspx>, or contact KPMA at 859-219-3571. Cost: KPMA Member—\$75, Non-KPMA Member \$100



Kentucky TOOLS (short for Tank Operator Online Learning System) is online UST operator training for Kentucky DCMs.

If you own a UST in Kentucky that is active or temporarily closed, the UST Branch will contact you when it's time for you to select a DCM (yourself or someone else) to take the training. At that time, you'll be issued a PIN that you'll need to access TOOLS and select your DCM.

**For more information on operator training, go to the UST Branch website or contact Leslie Carr at [Leslie.Carr@ky.gov](mailto:Leslie.Carr@ky.gov) or 502-564-5981, ext. 4778.**

## Wrap-up: December 2013 Deadline for Upgrading Internally Lined USTs

By Kathleen Riggs, UST Branch Compliance Section Environmental Technologist

The 2013 holiday season has come and gone and, with it, the Dec. 22, 2013 deadline for upgrading internally lined tanks. Kentucky USTs that used only internal lining for corrosion protection had to have a passing manned entry integrity assessment and impressed current cathodic protection, or had to be permanently closed.

As of February 2014, approximately 82 percent of UST facilities with these criteria took the initiative to make the necessary upgrades and are compliant with the regulation. We are pleased to recognize the owners' efforts in meeting these requirements.

If you have questions regarding the Dec. 22, 2013 deadline or the delivery prohibition process, please contact Stephen Kent at [Stephen.Kent@ky.gov](mailto:Stephen.Kent@ky.gov) or 502-564-5981, ext. 4776.



**Underground Storage Tank Branch  
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UST Program  
Information  
Enclosed

## **UST Field Notes** *Water Intrusion*

By Stephen Kellerman, Field Operations Branch Environmental Scientist

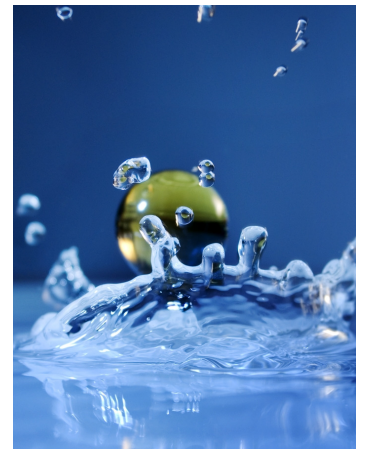
Water intrusions are one of the most common types of suspected releases, and any water intrusion exceeding 1 inch must be reported to the Environmental Response Branch's 24-hour reporting hotline at 800-928-2380. The 1-inch water limit comes from the definition of *Unusual Operating Condition* defined in 401 KAR 42:005 Section 1. Water intrusions in a tank can originate from a variety of sources, but are usually from a spill bucket, vent line, or other loose riser at the top of the tank.

It's very important to keep water out of any UST system, especially those containing fuels with ethanol. A small amount of water can cause phase-separation, which can result in bad fuel quality and stalled vehicles.

Inspectors check for excessive water in spill buckets and may manually gauge tanks with water-finding paste. Many UST facilities use an automatic tank gauge (ATG) that continually monitors the tanks for water. There can be problems if the floats that measure the water are stuck or broken, there is a build-up of sludge on the bottom of the tank, or if the alarms (which can be programmed at different levels) are not set properly. Sites that do not use an ATG should check each tank for water at least once every month.

Please note that if an inspector is able to verify that a tank has greater than 1 inch of water, the system may be prohibited from deliveries and sales until the water is removed, the source investigated, and the system is verified to be tight. It's very important for the UST owner and operator to stay on top of checking for water and making any needed repairs.

Stephen Kellerman can be reached at [Stephen.Kellerman@ky.gov](mailto:Stephen.Kellerman@ky.gov) or 502-564-3358, ext. 4316.



Visit our website today at <http://waste.ky.gov/ust>.