



# UST QUARTERLY



A Newsletter of the Kentucky Underground Storage Tank Program

Volume 5, Issue 2  
2013

**Commonwealth of Kentucky**  
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**Energy and Environment Cabinet**  
Leonard K. Peters, Secretary

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**Division of Waste Management**  
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**Underground Storage Tank Branch**  
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## NOTICE: Internal Lining Deadline is Dec. 22, 2013 - Act Now!

An important date is rapidly approaching for Kentucky USTs that use only internal lining for corrosion protection. By Dec. 22, 2013, these tanks must have a passing manned entry integrity assessment and impressed current cathodic protection, or must be permanently closed.

It is important to act now if you have not addressed this requirement. Throughout the last year, we have provided several notifications to affected owners and operators regarding this deadline for meeting the requirements. It has been in the Kentucky UST regulations since Oct. 6, 2011.

**For more information on this requirement, contact Denise Dzurenka at [Denise.Dzurenka@ky.gov](mailto:Denise.Dzurenka@ky.gov) or 502-564-5981, ext. 4607.**



## Benefits of Geophysics on UST Sites

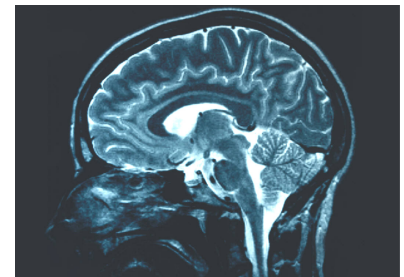
By Larry Hughes, P.G., UST Branch Corrective Action Supervisor

Applying geophysics to challenging environmental projects provides an enhanced alternative and insight into the subsurface unlike conventional methods. Geophysics is a veteran and established technology that has been applied for 50+ years in other industries. Its use on environmental projects is relatively new but is maturing and establishing. Its value, relative to traditional assessment techniques, is realized in the concrete and cost-effective benefits it delivers short- and long-term.

Time and cost-saving benefits of using geophysical methods are immediately realized because these methods are noninvasive – they don't require direct access to the subsurface like excavation or drilling (with the exception being borehole methods). Think of it as imaging for the underground. In most cases it's similar to someone using a metal detector or utility companies marking underground utilities.

*There's minimal interruption to land owners, residences or businesses as their property is virtually untouched when geophysical methods are used.*

In addition, vast volumes of subsurface data can be gathered in a short time at far less cost than excavation or grid-drilling methods. For example, geophysics can typically be performed in less than one to three days on a UST site with preliminary



*"Think of it as imaging for the underground."*

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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**

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



## Kentucky UST Operator Training and Assistance Update

If you own a UST in Kentucky that is active or in temporary closure, the UST Branch will contact you when it's time for your Kentucky TOOLS training. At that time, you will be issued a personal identification number (PIN) needed to access the online training. PINs will be issued over the course of the next year. UST operator training is required by state and federal law.

Kentucky UST operator training for designated compliance managers (DCMs) is free and is provided through the Kentucky UST Program. Kentucky TOOLS, the online training application, is the gateway to an electronic library of lessons crafted to satisfy state- and federal-mandated training requirements for UST personnel. We are here to assist you during office hours with your operator training questions and needs.

While this operator training and assistance is free through the Kentucky UST Program, the Kentucky Petroleum Marketer's Association (KPMA), in partnership with the Kentucky UST Program, is conducting seminars on Kentucky TOOLS across the Commonwealth. These seminars are training opportunities available to you and typically include lunch provided by KPMA. These seminars are not required. KPMA charges \$75 for members and \$100 for nonmembers. The registration fee includes a KPMA handbook on Kentucky TOOLS. Outside of the seminar, KPMA offers the handbook at \$50 for members and \$75 for nonmembers. Seminars are scheduled through October 2013. Visit KPMA's website for details at [www.KPMA.net](http://www.KPMA.net).

Beyond October, the Kentucky UST Program plans to schedule additional seminars as needed. If you or your organization would like to discuss customized hands-on assistance with operator training, please let us know.

For more information on operator training, go to our website at <http://waste.ky.gov/ust/pages/ot.aspx> or contact Leslie Carr at [Leslie.Carr@ky.gov](mailto:Leslie.Carr@ky.gov) or 502-564-5981, ext. 4778.

### Use current UST forms

Did you know ... if you don't submit the current version of a form, we can't accept it? That's right. For legal reasons, we must return them to you and politely ask that you submit current UST forms. The only exception is for claims and payments forms for directives issued prior to Oct. 6, 2011.

The current UST forms are posted on our website at <http://waste.ky.gov/ust>. If you let us know, we can also mail, email or fax current forms to you.

### Field Notes

#### *Introduction to the Field Operations Branch and Inspections*

By Stephen Kellerman, Field Operations Branch Environmental Scientist

An integral part of the Kentucky UST Program is the compliance inspections conducted by the Field Operations Branch. Managed by Jon Maybriar, this branch consists of a central office in Frankfort and 10 regional offices situated across the Commonwealth. Branch personnel include supervisors, inspectors, geologists and environmental scientists to assist the surrounding counties with their needs.

What you may not know is that the Field Operations Branch personnel perform routine compliance inspections for three Division of Waste Management programs: hazardous waste, solid waste, and underground storage tanks.

Inspectors also investigate complaints from citizens related to these programs or any waste management issues, and follow up on reported suspected UST releases.

If you have questions for the Field Operations Branch regarding UST inspections or complaints, feel free to contact me, Stephen Kellerman at [Stephen.Kellerman@ky.gov](mailto:Stephen.Kellerman@ky.gov), Brian Schrader at [Brian.Schrader@ky.gov](mailto:Brian.Schrader@ky.gov), or any of the Field Operations Branch offices.

Complete contact information for Division of Waste Management regional offices is listed online at <http://dep.ky.gov/Pages/RegionalOffices.aspx>.

### Check out our online services



*Submit Documents*  
*Pay Annual Tank Fees*  
*Complete Operator Training*

Use online services and make UST-related business with the Commonwealth quicker, easier and greener.

*Questions about  
UST inspections?  
FOB offices can help.*

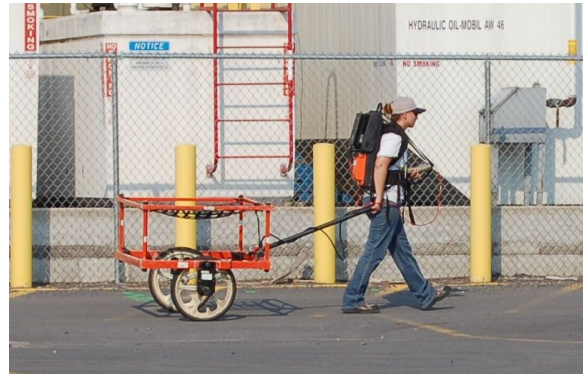
Frankfort	
Central Office	502-564-6716
Bowling Green	270-746-7475
Columbia	270-384-4735
Florence	859-525-4923
Frankfort	502-564-3358
Hazard	606-435-6022
London	606-330-2280
Louisville	502-429-7120
Madisonville	270-824-7532
Morehead	606-783-8655
Paducah	270-898-8468

## Benefits of Geophysics on UST Sites *(continued from Page 1)*

results being in hand before leaving the site. Conventional methods typically take several days to weeks to complete in the field and results often come many weeks later. Geophysical methods typically cost \$4,000 to \$12,000 per site depending on the need and size of the project. In contrast to this, groundwater monitoring typically costs \$12,000 to \$70,000 over a five-year lifespan for five to 10 monitoring wells and still leaves a lot of doubts as to the understanding of the subsurface.

*The most significant time and cost savings aspect of geophysics is in the type and amount of the data generated.* Geophysics is unequalled in providing fit data for the conceptual model of a UST site. Geophysics provides more data density per area than any traditional method. A typical geophysical study will produce 30,000 to 40,000 data points per acre as opposed to 30 to 40 data points using conventional techniques. That's 1,000 times more information per area gathered for decision making whereby we can then make more accurate interpretations of complex environmental problems. *It's comparable to using a geological version of an X-ray or MRI to determine the scope of an environmental problem, rather than exploratory surgery.*

An accurate conceptual site model is the most significant part of an environmental project, as it is the basis for determining the best plan for cleaning up a site. An incomplete model of a site, based on inadequate data and methods, adversely affects all aspects of the project like compounding interest. What tends to drag a project out, escalate costs, and lead to apparent failure is generally not the remedy itself, but the type and methods of data acquisition. Suitable data and methods for gathering it facilitate a comprehensive conceptual model that helps develop the remedial



*Conducting an electromagnetic metal detection survey can locate buried metal objects (such as tanks, piping and conduits) within the upper 10 feet of the subsurface. Photo courtesy of Mundell & Associates.*

objectives and implementation of the remedy toward those objectives in much shorter time frames and at less cost to the project. Geophysical methods precisely fit this need.

The use of geophysics on environmental projects is an effective tool to expedite all aspects of uncovering the site's problems and devising the best solution. It significantly helps identify site specific clean up objectives, deployment, and completion toward those objectives in much shorter time and at far less cost. By more clearly understanding a site's specific conditions and dynamics with geophysics, one can greatly reduce the number of unknowns that tend to cause over or under reaction to a specific site. *This ultimately translates into properties being freed up and put back into good economic and beneficial use sooner than later as sensible remedies with balanced objectives are implemented properly.*

For more information, contact Larry Hughes, P.G., at 502-564-5981, ext. 4019 or [Larry.Hughes@ky.gov](mailto:Larry.Hughes@ky.gov).



**Bright ideas?  
Tell us  
what you think.**

Let us know if there is something you would like to see in the UST Quarterly. Send your ideas, suggestions and photos to Virginia Lewis. [Virginia.Lewis@ky.gov](mailto:Virginia.Lewis@ky.gov) or 502-564-5981, ext. 4024



**Underground Storage Tank Branch  
200 Fair Oaks Lane  
Frankfort, KY 40601**



UST Program  
Information  
Enclosed

## 2013 Annual Tank Fee Invoices Mailed in July

If you own **USTs that are active or in temporary closure**, you should've received your 2013 annual tank fees invoice in the mail.

Fees are \$30 per active or temporarily closed UST that you own, even if the UST isn't presently being used.

### Two ways to pay

#### \*\*\* Online \*\*\*

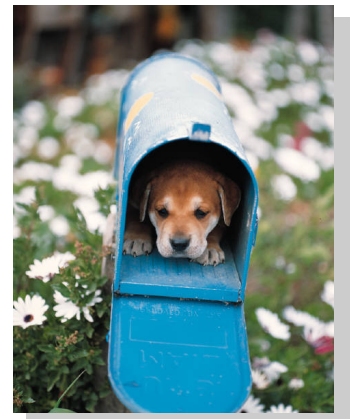
Paying online is free, secure and easy to use. To use this service, visit the UST Branch website at <http://waste.ky.gov/ust> and follow the links.

#### \*\*\* Mail \*\*\*

Make checks payable to the Kentucky State Treasurer.

Mail payments to:

Kentucky Dept. for Environmental Protection  
UST Branch  
200 Fair Oaks Lane, 2nd Floor  
Frankfort, KY 40601



**For questions regarding annual  
tank fees, contact the UST Branch  
Administrative Section at 502-564-5981.**

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