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Inside this issue:	
Vapor Intrusion	2
How Can UST Releases Be Prevented?	3
Tip on Submitting Claims	3
Upcoming AIPG Seminar	3
Talk to Us	3
Owner Notification Reminder	4

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For more information, comments or story suggestions, please contact the editor of the UST Quarterly, Virginia Lewis. She can be reached at Virginia.Lewis@ky.gov or 502-564-5981, ext. 4024.

To report a release or suspected release call the ERT hotline. 1-800-928-2380

Revised PSTEAF Deadlines, Restriction Lifted

Kentucky lawmakers recently passed two bills, House Bill 124 and House Bill 378, that will respectively extend select deadlines and lift a restriction in the Kentucky Revised Statutes relating to underground storage tanks (USTs). These changes primarily pertain to the Petroleum Storage Tank Environmental Assurance Fund (PSTEAF or the fund). The new legislation was signed by the Governor and will take effect in mid July.

The fund was created to assist owners and operators of petroleum USTs in 1) meeting the federal financial responsibility requirement and by 2) providing reimbursement of eligible corrective action costs due to releases from petroleum UST systems. The PSTEAF has three subaccounts used for UST purposes. These are the Financial Responsibility Account (FRA), the Petroleum Storage Tank Account (PSTA) and the Small Owners Tank Removal Account (SOTRA).

> House Bill 124 will extend the fund deadlines in these sections of KRS 224.60 in the following ways :

Registration KRS 224.60-142(2)

The owner of any petroleum storage tank containing motor fuels currently existing, or removed from the ground after January 1, 1974, shall register the petroleum storage tank containing motor fuels with the cabinet prior to applying to the fund, and shall register the petroleum storage tank containing motor fuels by July 15, 2013. Owners or operators may submit affidavits and applications relevant to current petroleum storage tank accounts through July 15, 2013.

SOTRA KRS 224.60-145(8)

... the small operator assistance account and small operator tank removal account established under KRS 224.60-130 shall continue in effect until July 15, 2013, and thereafter until all eligible claims related to tanks registered by that date are resolved, and sufficient money shall be allocated to and maintained in that account to assure prompt payment of all eligible claims, and to provide for removal of tanks for eligible owners and operators as directed by this chapter.

PSTA KRS 224.60-130(1)(e)

... Reimbursements of corrective action projects performed under the petroleum storage tank account shall be carried out on or before July 15, 2016. Any corrective action costs incurred after this date shall not be eligible for reimbursement under the petroleum storage tank account ...



KRS 224.60-130(1)(j) ... The division shall not place a limit on the number of tanks that an owner or operator has in order to be eligible to participate in the program (SOTRA) and receive reimbursement under this paragraph; ...



Visit us on the Web today at www.waste.ky.gov/branches/ust.



Vapor Intrusion

By Sarah Jon Gaddis, PG – Kentucky Division of Waste Management

Most citizens of Kentucky are keenly aware of the problems associated with contaminated soil, groundwater, rivers and streams. However, few consider subsurface contaminants that can move through the soil in the form of vapor, providing another pathway for human exposure. Vapor in the subsurface can be swept into structures that overlie contaminant plumes. The resulting condition is called vapor intrusion. Vapor intrusion can affect indoor air quality and may pose health risks, including increased cancer risk due to chronic exposure.

The evaluation of vapor intrusion requires a multidisciplinary approach. Geologists and engineers are needed to evaluate the subsurface transport of contaminants in order



to determine the source of contamination as well as to consider the entry points of vapor into overlying structures. Risk assessors aid in the process by quantifying the risk of human exposure to vapors present within the structures. Other sets of technical skills are needed to assess heating and cooling systems, air exchange rates, building construction and remedial technologies to prevent the entry of vapor into structures.

Presently, 24 states have published regulations or regulatory guidance regarding vapor intrusion. In this emerging environmental field, vapor intrusion experts are still in the process of researching methods for assessment of the vapor pathway, determining the levels at which various contaminants pose health risks and finding new and innovative ways to remediate impacted indoor air. The Division of Waste Management is focused on these efforts, as well, in an effort to protect the citizens of Kentucky from the threat of vapor intrusion resulting from subsurface contamination.

To this end, the division established the Vapor Intrusion Workgroup in 2008 as the first step toward establishing a division-wide approach for addressing vapor intrusion. The workgroup is comprised of staff from the Superfund Branch, Field Operations Branch, Hazardous Waste Branch and Underground Storage Tank Branch as well as members of the Department for Environmental Protection's Emergency Response Team. The goals of the Vapor Intrusion Workgroup are straight-forward, with division-wide consistency being key.

The rest of this story by Sarah Jon Gaddis, PG, can be found in the Kentucky Division of Waste Management Annual Report Fiscal Year 2009, beginning on page vi. This report is on the division's Web site at <u>www.waste.ky.gov.</u>

Vapor Intrusion Workgroup Goals

* Determine the volume and distribution of sites regulated by the division where vapor intrusion is being actively assessed.

* Develop action levels for emergencies and investigations.

* Identify values that are representative of background contaminant values.

* Develop a consistent approach for identifying sites that should be assessed for vapor intrusion.

* Developing a consistent approach for vapor intrusion investigations and remediation.

* Provide training to technical staff within the division.

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How Can UST Releases be Prevented?

Part of the regulations for UST systems requires them to be protected from spills, overfills, and corrosion. This is a four-part series on what you can do to prevent UST releases.

PART 2 of 4 : Overfill Protection

If delivery drivers or UST owners make fuel delivery mistakes, a tank can be overfilled quickly and large volumes of fuel can be released. Overfills usually result from human error and can be avoided if everyone involved in the fuel delivery follows industry standard practices for tank filling.

Your UST must have overfill protection. The three main types of overfill protection devices are automatic shutoff devices, overfill alarms, and ball float valves.

Overfills usually release much larger volumes than spills. When a tank is overfilled, large volumes can be released at the fill pipe and through loose fittings on the top of the tank or a loose vent pipe. The tightness of these fittings normally is not a problem if the tank is not filled beyond its capacity. You can solve overfill problems by doing the following:



* Make sure there is enough room in the tank for the

delivery before the delivery is made.

* Watch the entire delivery to prevent overfilling or spilling.

* Use overfill protection devices.

If a UST never receives more than 25 gallons at a time, the UST does not have to meet the overfill protection requirements. Many small used oil tanks fall into this category.

NOTE: If you have "pumped delivery" where fuel is delivered under pressure, make sure your overfill protection device works properly with pumped deliveries.

It Takes More Than Equipment

Remember that it takes more than equipment to be in compliance and to have a safe site. Overfill protection devices are effective only when combined with careful filling practices and equipment must be properly operated and maintained over time or there will be no benefit in having it. Failure to operate and maintain equipment can lead to new releases, which can be very costly and time consuming.

More information on industry codes and standards for UST systems can be found on the Environmental Protection Agency's Web site at www.epa.gov/oust/cmplastc/standard.

Tip on Submitting Claims

According to 401 KAR 42:250 (8), "All claims shall be submitted within two (2) years after issuance of a no further action letter by the cabinet."

We have many reports in house that have been deemed technically complete but no claim has been submitted. Without a claim, payments can't be issued.

It is beneficial to all parties if claims are submitted as soon as possible so they can be processed. Please check your records to make sure your claims have been submitted.

Upcoming AIPG Seminar

The Kentucky chapter of the American Institute of Professional Geologists (AIPG) will be hosting a seminar on remediation on Aug. 7, 2010. Approximately 75 percent of the program will be directed primarily toward UST petroleum site activities. The remainder will cover site assessment and remediation technologies that are applicable to both petroleum and other contaminants.

For more information on this seminar, go to the Web site for the Kentucky chapter of the AIPG:

http://professionalgeologist.org

Talk to Us

Tell us what you think. Let us know if there is something you would like to see in the UST Quarterly. Help us help you and tell us what you think.

Let us know if you can convert from a paper to electronic subscription.

This publication is best viewed electronically and is e-mailed on a quarterly basis. If you received a paper copy, please contact us to request future issues via e-mail.

Contact: Virginia Lewis E-mail: Virginia.Lewis@ky.gov Phone: 502-564-5981, ext. 4024



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



Important Program Information Enclosed!

Owner Notification *Reminder*

This is a reminder that the Underground Storage Tank Branch will be issuing site-specific notifications to all owners of active and temporarily closed USTs.

Your letter will list the specific components of your tank system and what compliance tests are required on those components by law.

The required compliance tests are dependent on the components of your UST system. It is very important that you closely review the information for your site and report any discrepancies to our office.

Knowing your underground storage tank system and what it takes to maintain it is one of the first steps in successful system maintenance and leak prevention. Maintaining operational

> compliance through leak detection, corrosion protection, overfill and spill prevention and performing routine tank and line tightness tests are critical aspects of leak prevention.

Know the Required Tests

For Your Active and Temporarily Closed UST Systems

Depending on your UST system components, you may be required to submit the following tests:

- Cathodic Protection Survey
- Line Tightness Test
- Tank Tightness Test
- Line Leak Detector Test

It is very important that you know your UST system and the compliance tests it requires. If you don't know, please contact us for assistance.

Visit us on the Web today at <u>www.waste.ky.gov/branches/ust</u>.