

Tank product levels important when obtaining monthly ATG passes

Trey Morgan, Environmental Health Manager, Underground Storage Tank (UST) Regulatory Compliance Section

If you are a tank owner using an automatic tank gauge (ATG) as your form of monthly tank leak detection, then you have probably experienced difficulties getting passes with low product levels in your tanks. Tank owners often wonder how much product must be in a tank for the ATG to conduct an accurate 0.2-gallons-per-hour test. The minimum level of product required varies and is dependent upon several factors including:

- whether or not you are using a continuous leak detection method or static testing;
- the type and brand of ATG;
- the exact dimensions of your tank; and
- what type of probe you are using.

During a static test, the tank must remain idle with no deliveries or sales. When the ATG goes into leak test mode, it measures product level and temperature for a set period of time and then determines if there is a leak.

With any continuous leak detection software, down time is not required, since the ATG measures product level and temperature readings during periods of no activity over the course of the month. All the gathered data is then analyzed by the ATG to give a pass or fail result for the time period covered.

Incon and Veeder Root are two of the most common ATG manufacturers used in South Carolina. Both systems

are National Work Group listed. Many ATGs are equipped to conduct both static and continuous testing.

Fuel levels required for these systems are outlined below.

INCON

Static testing:

Diameter of Tank	Amount of Product
48 inches	12 inches
64 inches	14 inches
72 inches	15 inches
96 inches	17.5 inches
126 inches	21.5 inches

SOURCE: www.nwglde.org/evals/franklin_fueling_c.html

NOTE: For continuous leak detection (Statistical Continuous Automatic Leak Detection with Incon), you must keep the tank between 14 percent and 93.5 percent full. (SOURCE: www.nwglde.org/evals/franklin_fueling_e.html)

VEEDER ROOT

Static testing:

Diameter of Tank	Amount of Product
48 inches	18 inches
64 inches	21 inches
72 inches	24 inches
96 inches	30 inches
126 inches	39 inches

SOURCE: http://nwglde.org/evals/veeder_root_i.html

NOTE: For continuous leak detection (Continuous Statistical Leak Detection with Veeder-Root), you must keep the tank between 14 percent and 93.5 percent full.

These figures are the key to receiving monthly in-tank passing results. Keep in mind, however, that the numbers outlined above serve only as guidelines, since your tank may require a little less or a little more product to get a valid leak detection result. If you have had difficulty in continuously maintaining sufficient fuel in your tank for monthly in-tank testing, consider the following.

- Determine if your ATG console is equipped with continuous leak detection capabilities. If so, you could begin using continuous leak detection methods to meet your monthly requirement.
- Statistical Inventory Reconciliation is a popular method of tank leak detection that requires no additional purchases of equipment (only vendor fees). This method is accurate, regardless of inventory levels and also tests for leaks in the piping system.

Continued, see **LEVELS** on Page 4

Inside . . .

Sometimes faster is better.....	2
Delivery Prohibition Process Reminder	2
ITRC Project: Environmental impacts of ethanol, bio-based fuels	3
Certified, Decertified UST Contractors	3
Operator Training Update.....	3

CORRECTION FROM THE LAST ISSUE:

In the "Estabrook Ezy 3 Locator Plus" article by Trey Morgan, the sentence in the second to last paragraph should have read, "If there were no fuel to consume water, the sensor would be able to find water coming in as intended."

Sometimes faster is better

From the UST Program's Corrective Action Section

While we all desire to prevent releases from tank systems, leaks sometimes occur.

If petroleum gets into the soil and groundwater, it is very difficult to remove. In fact, the cleanup process may take years to complete.

In order to encourage contractors to finish Superb-qualified cleanups faster, the UST Management Division established an incentive bonus for most cleanups implemented after January 2006. In order to receive the bonus, the environmental contractor must undertake cleanup in a more aggressive manner, such that cleanup is finished within a time period specified by the division.

In general, site incentive periods range from 24 to 42 months with the longer time frames associated with larger contamination problems. Although the site incentive periods are designed to be obtainable, most contractors over the last four years have not achieved cleanup within the site incentive periods.

The Corrective Action Section would like to congratulate **Schnabel Engineering** for achieving cleanup at Gaslo 745, UST Permit #07923, within the designated site incentive period.

For this facility – located in Richland County – the site incentive period was established as 36 months. The system startup date was April 11, 2007 and the UST Program-verified system and well abandonment activities in early February 2010. In return, Schnabel Engineering received a 10 percent financial bonus in return for their proactive cleanup efforts.

Delivery Prohibition Process Reminder ...

Patti Ellis, UST Program, Columbia

The Energy Policy Act of 2005 (EPA Act) required states receiving federal funding to develop a delivery prohibition program. On May 23, 2008, changes to South Carolina Underground Storage Tank Control Regulation, R.61-92, Section 280.22 (i) for delivery prohibition authority became effective. These regulations are available at www.scdhec.gov/environment/lwm/html/ust.htm.

To comply with federal laws, DHEC developed a procedure to affix a tag to the fill port of any tank(s) determined to be ineligible to receive fuel. The procedure for implementing delivery prohibition begins with a notice of violation. The owner/operator will then be given a certain amount of time to correct the violation and notify DHEC. If corrections are not made by the deadline, a red tag (pictured on the right) will be affixed to the fill port. The facility name also will be posted to the UST Delivery Prohibition Web site – www.scdhec.gov/environment/lwm/html/ust_prohibit_delivery – for distributor review.

A notice of violation may be issued for one or more of the following conditions:

- required spill prevention equipment is not installed;
- required overfill protection equipment is not installed;
- required leak detection equipment is not installed;

- required corrosion protection equipment is not installed;
- failure to pay annual tank registration fees;
- failure to properly operate and/or maintain leak detection equipment;
- failure to properly operate and/or maintain spill, overfill or corrosion protection equipment;
- failure to maintain financial responsibility; or
- other conditions DHEC deems appropriate.



If your tanks have a red tag affixed to the fill port, contact DHEC to find out what corrections need to be made. Delivery prohibition can only be lifted once DHEC receives the information (i.e., test records, financial responsibility, invoices, reports, written documentation of repairs) showing the violations have been corrected.

Once DHEC verifies the corrections have been made, a representative will contact the owner/operator and instruct them to remove the tag or the UST inspector will remove the tag. The site also will be cleared from the delivery prohibition Web site. No one should remove a tag unless directed to do so by a DHEC representative. Removing a tag without DHEC authorization will result in penalties and may result in criminal charges.

If you have any questions about delivery prohibition, call DHEC at **(803) 896-7957**.

ITRC Project: Environmental impacts of ethanol, bio-based fuels

Alison Hathcock, Regulatory Compliance Section

The Interstate Technology Regulatory Council (ITRC) develops information resources and innovative solutions to environmental challenges through an active network of diverse professionals. The Interstate Technology Regulatory Council (ITRC) develops information resources and innovative solutions to environmental challenges through an active network of diverse professionals. ITRC is an association that is comprised of representatives from state and federal governments, industry and academics. The association focuses

on regulation and technical issues, with the goals of reducing compliance costs, making it easier to utilize new technologies and helping states to maximize resources. The participants develop guidance documents and training courses to meet the needs of both regulators and environmental consultants.

One of the many ongoing projects that ITRC currently is creating is a document that addresses the potential impacts of biofuels on equipment (mainly ethanol and biodiesel) and how these impacts would differ from those

Continued, see **FUELS** on Page 4

Operator Training Update

Jessica Price, UST Program, Regulatory Compliance Section

By the time this newsletter reaches you, we will have passed the halfway mark for operator training. Remember, all facilities must have at least one trained Class A/B operator by August 8, 2011.

As of November 1, 2010, there were 745 individuals trained as A/B operators representing 672 facilities. This is only 16 percent of the total tank facilities in South Carolina.

There are several options to receive training in South Carolina:

- DHEC's Operator Training course;
- operator training courses conducted by other states that obtain prior approval from DHEC;
- operator training courses conducted by UST owners and operators that obtain prior approval from DHEC;
- operator training courses conducted by third-party providers that obtain prior approval from DHEC; or
- successfully completing a state or national UST operator exam.

The online training program that DHEC developed is FREE to the public. To access it, visit www.scdhec.gov/ust. Click on OPERATOR TRAINING and then UST ONLINE OPERATOR TRAINING. The online training requires Internet Explorer 7 or higher as well as Adobe Acrobat Reader. If you are having problems with the application, contact Matt Schelling at **(803) 896-6846**.

If you have any questions about operator training, contact Jessica Price at **(803) 896-6650** or priceje@dhec.sc.gov.

Certified, Decertified UST Contractors

UST contractors who are involved with routine investigative activities and interpretation of geologic data associated with releases from UST's must be certified in accordance with the SUPERB Site Rehabilitation and Fund Access Regulations R.61-98. The following tables show newly certified contractors as of November 2010 as well as contractors who are no longer certified to conduct activities as defined by R.61-98. A complete listing of certified site rehabilitation contractors can be found at www.scdhec.gov/environment.

NEW CERTIFIED SITE REHABILITATION CONTRACTORS

PERMIT #	CONTRACTOR	DATE CERTIFIED
UCC-0402	Genesis Project, Inc.	06/03/2010
UCC-0400	The Louis Berger Group, Inc.	06/03/2010
UCC-0401	Simon & Associates, Inc.	06/15/2010
UCC-0404	Henry Nemargut Engineering Services	06/29/2010
UCC-0403	Tetra Tech - Pittsburg, PA	06/29/2010
UCC-0407	Hydrogeologic, Inc.	07/26/2010
UCC-0406	M.D. Shaw & Associates, PC	07/26/2010
UCC-0405	Mid-Carolina Probe, LLC - Greer, SC	07/26/2010
UCC-0408	Mid-Carolina Probe, LLC - Columbia, SC	08/24/2010
UCC-0408	Oneida Total Integrated Enterprises	10/27/2010
UCC-0409	Spectrum Nationwide Environmental, Inc.	11/22/2010

DECERTIFIED SITE REHABILITATION CONTRACTORS

PERMIT #	CONTRACTOR	DATE DECERTIFIED
UCC-0171	Green Earth, Inc.	05/19/2010
UCC-0028	Integrated Science & Technology*	06/15/2010
UCC-0348	Toltest, Inc.	06/15/2010
UCC-0250	General Physics Corporation	09/23/2010
UCC-0322	SRS Remediation	09/24/2010
UCC-0125	Ecology & Environment, Inc.	10/19/2010
UCC-0031	Environmental Corporation of America	11/18/2010
UCC-0195	Smith Monitoring & Maintenance Engineering, Inc.	11/30/2010
UCC-0066	Duncan Environmental Associates	12/16/2010

*NOTE: Integrated Science & Technology closed their Charleston office and are working only with the Georgia office.

LEVELS, continued from page 1

- If you have a double-wall tank, you may conduct interstitial monitoring instead of in-tank leak detection to meet the monthly requirement.
- Change your tank status to "extended out-of-use." With this option, product is pumped from the tank to 1 inch or less. Once empty, monthly leak detection is not required. Yearly registration fees, cathodic protection and financial responsibility, however, are still necessary.

One passing test per tank per month is required for all tanks currently in use. Therefore, understanding your tanks and ATG system's capabilities and limitations are crucial. When you see a non-pass, take time to understand the factors that have influenced the test results, such as low product levels. Notify DHEC at **(803) 896-7957** if you do not receive one pass per tank per month. It also is important to keep in mind that ATG testing can only detect leaks within the product level, so the portion of the tank without product remains untested.



PREVIOUS WINNER: The S.C. Army National Guard FMS #5 Rock Hill was the non-retail winner of the Environmental Excellence Award for January 2010. UST Inspector Ben Goodwin presents guard members with their award.

FUELS, continued from page 3

of standard petroleum. The goal of the pending document is to develop a proactive information resource dealing with the prevention, detection and characterization of releases to the environment as well as the evaluation of remedial action options and identifying best management practices for the distribution and storage of these fuels.

The document will identify various remediation technologies and how those technologies would be affected by an ethanol release. In addition, the document also will identify case studies where equipment has failed, why it failed and how to prevent failures in the future. Key maintenance issues as well as best management practices also will be addressed.

The project plays an important role as ethanol and other bio-based fuels are increasingly being produced and used in the United States. Release prevention methods specific to these fuels must be addressed to prevent or minimize potential impacts to the environment. The projected deadline for the hard copy of the document is early 2011. ITRC plans to offer online training to industry and the public.



UST NEWS STAFF

Editor: **Eric Cathcart**

Publishing Editor: **Donna M. Owens**

Distribution: **SC Division of UST Management**

(803) 896-7957 ■ FAX: (803) 896-6245

www.scdhec.gov/ust

Newsletter printed on RECYCLED paper.

OR-0943 12/10

Return Service Requested

Columbia, SC 29201
2600 Bull Street
S.C. DHEC

Underground Storage Tank Program