

THINK



Published by the Delaware Department of Natural Resources and Environmental Control Tank Management Branch as a service to the regulated community

Fall 2006

Number 51

A

N

K

DNREC Gathers Feedback on Draft Regulations

by Alex Rittberg

Delaware's Underground Storage Tank Regulations have not been revised in over ten years. To remain current with technological advances and to incorporate new requirements from the Federal government, the DNREC Tank Management Branch has proposed significant changes to the UST Regulations. The draft regulations include new requirements for UST owners and operators. Some of the key changes include requirements for secondary containment for new tank and piping installations, requirements for the installation of tank top and dispenser sumps, prohibition for the delivery of product into tank systems that are found to be significantly out of compliance, and requirements for operators to inspect their UST systems on a monthly basis. In addition, changes are proposed to the regulations governing reporting, investigation, and cleanup requirements after a release from an UST system occurs. These changes protect Delaware's groundwater and will help us meet new federal requirements contained in the 2005 Energy Policy Act.

The TMB conducted three (3) public workshops in September in an effort to ensure that all interested parties have an opportunity to provide feedback to the DNREC on the proposed changes. Stakeholders provided valuable feedback that will be incorporated into the final draft Regulations. A second workshop will be held in December on the final proposed Regulations. A formal public hearing is expected to be scheduled in early 2007.

If you have questions on the draft regulations, please contact Jill Hall at

302-395-2500, Jill.Hall@state.de.us. The draft regulations are available for public review by visiting the website <http://www.dnrec.state.de.us/dnrec2000/Divisions/AWM/ust/>, or by visiting the following offices between 8 a.m. and 4:30 p.m., Monday through Friday: the DNREC field office, 391 Lukens Drive, New Castle; the Richardson & Robbins Building, 89 Kings Highway, Dover; or the DNREC Field Office, Route 113, Sussex Suites, Unit 6, Georgetown.

AST Internal Inspection Deadline Looms

by Erich Schuller

Delaware's *Regulations Governing Above-ground Storage Tanks* (the AST Regulations) have requirements for external and internal inspections of ASTs. All ASTs greater than 12,499 gallons and storing a Regulated Substance other than diesel, heating fuel, and kerosene and all ASTs greater than 39,999 gallons storing a Regulated Substance are required to have an internal inspection by **June 11, 2007**, if a previous internal inspection cannot be documented. ASTs which have an established, documented internal inspection schedule with a previous internal inspection report containing recommendations and completed repairs shall continue to follow the established schedule and do not need to meet the June 11, 2007 deadline.

The internal inspection for metallic ASTs must be performed by a certified API 653

Continued on p. 2 – AST Deadline

AST Deadline

inspector or a certified STI SP001 inspector in accordance with the American Petroleum Institute (API) RP 653, *Tank Inspection, Repair, Alteration, and Reconstruction* document or the Steel Tank Institute (STI) SP001, *Standard for Inspection of In-Service Shop Fabricated Aboveground Tanks for Storage of Combustible and Flammable Liquids* document. The internal inspection of a non-metallic AST must be performed by an inspector familiar with the non-metallic material or materials from which the AST is constructed and qualified by experience for such inspections, including individuals certified under the American Society of Mechanical Engineers (ASME) RTP-1, *Reinforced Thermoset Plastic Corrosion Resistant Equipment* or the National Board Inspection Code.

The purpose of the internal inspection is to detect internal corrosion, or internal damage or defects which are not detectable from an external inspection. An internal inspection is an out of service inspection with the AST empty and clean so that all interior surfaces and equipment can be examined

and tested. Usually, physical entry into the AST is required in order to perform the internal inspection. A copy of the internal inspection report with the inspection findings must be submitted to the TMB and a copy must be retained at the facility for the life of the AST. The owner of an AST is required to follow the recommendations of the certified or qualified inspector including recommendations for repair or removal from service. The TMB must also receive a timetable for completion of the recommendations and repairs, and subsequently, documentation that the recommendations and repairs of the certified inspector or qualified individual have been completed.

The interval for the next internal inspection will be set by the certified inspector or qualified individual based upon the inspection findings. Under the API RP 653 standard, the interval for the next internal inspection may be as long as 20 years, if certain criteria are met.

If you have any questions, please contact the Tank Management Branch.

Winterizing Your Boat

by Pat Ellis

It's that time of year again — time to put away the shorts and sandals, and get out the coats and boots. It's also time to think about preparing your boat for storage over the winter. For those of you who own or work on diesel engines, it's business as usual. But for those who have gasoline-powered engines, the recent transition to E10 may mean some changes.

Humidity and condensation can create water in your fuel tank which can adversely affect the ethanol blended fuel. A condition called phase separation can occur if too much water accumulates in the fuel tank. This can cause the water and most of the ethanol in the fuel to separate from the gasoline and drop to the bottom of the tank. If this water and ethanol mixture is deep enough to reach the fuel inlet, it could be pumped directly to the engine and cause significant problems. Since the intake for the fuel line is at the bottom of the tank, a mixture of water and ethanol will reach the engine, and will cause the engine to be hard to start and to run poorly, if at all. A special 10 micron filter that can remove small amounts of water should be installed on your fuel line. There is no additive that can prevent or correct phase separation. The only solution is to keep water from accumulating in the tank. If phase separation occurs, your only remedy is to drain the

fuel, clean and dry the tank completely, and refill with a fresh, dry load of fuel.

Long periods of storage or inactivity are common for boats, and creates unique problems. When preparing to store a boat for extended periods of time, it is best to completely remove all fuel from the tank. If it is not possible to remove the fuel, maintaining a full tank of fuel with a fuel stabilizer added to provide fuel stability and corrosion protection is recommended. They are best used by adding to the tank at the recommended dosage, and running the engine for 10 minutes to allow the system to be cleaned. The fuel valve is then shut off to interrupt the fuel supply and the engine is allowed to run until it stops. Finally, top off the tank until it's full, and cap any openings to reduce the amount of exchange with the air that might bring in condensation. This will also help prevent moisture from accumulating in the tank and causing phase separation while the boat is in storage.

1960s and 1970s vintage boats, primarily those made by Bertram and Hatteras, often have fiberglass fuel tanks and may experience deterioration of these tanks that may lead to engine damage. These tanks may contain a polyester resin that is not compatible with ethanol-blended gasoline.

Proper care before storing your boat may prevent expensive problems later.

From Orphaned to Thriving - a FIRST Fund Success Story

by Chris Brown

The Fund for the Inability to Rehabilitate Storage Tanks (FIRST Fund) is available to identify and remediate properties where there is no known UST owner, or the tank owner is unable to pay for required tank removal, investigation, or cleanup work. At qualified properties, the Department will remove USTs, conduct investigations of known tank releases, and clean up releases. The work is conducted under the direction of the Tank Management Branch (TMB), by pre-qualified tank removal contractors and environmental consultants. To date, nearly 80 properties have been considered for eligibility, with over 90 percent of properties accepted into the Fund. Close to 30 properties have received "No Further Action" status through the program.

UST removal and cleanup of a release are, of course, expensive and may be a roadblock to the sale of a property and future redevelopment. A

success story where FIRST Fund eliminated a contaminant source and smoothed the path to site re-

use can be found along northbound Route 113 in Frankford. A few years ago, a passing motorist would have barely noticed the forlorn looking former service station on the property. Since January 2006, however, the property has been the new home for Maynard Esender Woodworks, a thriving enterprise with thirteen full-time employees, operating in Delaware since 1990.

The property had entered FIRST Fund under previous ownership, and the old USTs there were considered "orphans" due to the lengthy period of time that they had been out of service and neglected. During that time, the tanks very well could have been a lingering source of contamination; therefore, they needed to come out. Four steel tanks were removed by a contractor hired by the TMB. Tank removal then cleared the way for the sale of the property within several weeks.



Left - site before tank removal and site restoration.

The current owner, Maynard Esender, had kept an eye on the property from his old shop across Route 113, looking for more room for his woodworking and cabinetry business. A petroleum release was confirmed during the tank removal, requiring a hydrogeologic investigation to determine the extent. When the TMB approached Esender about keeping the property in the Fund and providing access for the investigation, his plans were already underway for site redevelopment.

The petroleum release was one of many issues the new owner faced during redevelopment, but the TMB made it "as simple as possible," according to Esender, to keep the process moving ahead. During the investigation, a consultant hired by the TMB referred to site plans to help select sampling and potential monitor well locations. Fortunately, only minor concentrations of residual petroleum were discovered in the soil and groundwater, so No Further Action status was granted by the TMB. Another UST, discovered two weeks later during demolition of the old buildings, was also removed

through the Fund. No further corrective action was needed following its removal. With the UST issues in the past, site development progressed until the business moved across the highway to its new home.

For more information about FIRST Fund, please consult the TMB web page or call Chris Brown at (302) 395-2500.

THINK TANK

Becky Keyser, Editor
Gary Charles, Publisher
Tripp Fischer, Technical Editor

Contributing Staff

Chris Brown
Erich Schuller
Pat Ellis

DNREC
Tank Management Branch
391 Lukens Drive
New Castle, DE 19720

Tel: (302) 395-2500
Fax: (302) 395-2555
DNREC_AWM_Tanks@State.de.us

Alex Rittberg—Branch Manager

Program Managers:
David Brixen—Compliance
Jenn Roushey—Corrective Action

James Harlan—Director, Boiler Safety
(302) 744-2735



Announcements and Upcoming Events

Brian Churchill - Jacob Churchill was born July 15th and weighed 8 lb 1 oz and 21 inches long. Congratulations to the Churchill family!

TMB to solicit RFP from Contractors and Consultants

DNREC's Tank Management Branch will be soliciting a Request for Proposal (RFP) from contractors and consultants for its tank closure and investigation contracts. The current contracts will expire in February 2007. To become eligible, consultants should obtain a copy of the RFP during the advertising period, and send qualification packages to the Department by the dates advertised in the RFP. Bid requests will subsequently be submitted to one or many qualified consultants for individual sites in accordance with the contract.

Please refer to *The News Journal*, the *Delaware State News*, and the following websites during the advertising period in December or early January:

<http://www.dnrec.delaware.gov/default.htm>

<http://www.dnrec.delaware.gov/AWM>

<http://www.state.de.us/dss/>

Did you know?

- Delaware has 1573 active federally regulated USTs at 552 facilities. These are tanks that are regulated by both the Federal government and the State. These tanks are greater than 110 gallons and contain a regulated substance. Farm, and residential tanks less than 1100 gallons are exempted as are heating oil tanks less than 1100 gallons.
- In addition to these there are another 262 USTs at 193 facilities that are regulated by the State, but are not federally regulated. These are heating oil tanks with a capacity greater than 1100 gallons.
- Delaware has 3363 ASTs that are registered either as in-service or out-of-service. The tanks range in size from 75 gallons to greater than 16 million gallons.

<http://www.dnrec.state.de.us/dnrec2000/Divisions/AWM/ust/>

DNREC/TMB
391 Lukens Drive
New Castle, DE 19720

Doc. #40-09-03/06/11/01

