Maine Department of Environmental Protection

Tanks In Maine

News for Those Who Install, Inspect or Manage Underground or Aboveground Tanks in Maine

Volume 4, Issue 1 June, 2008

Ethanol and Flexible Piping

The availability of ethanol blended fuels is becoming much more prevalent in Maine than originally thought. With this influx of ethanol into the state, the concern over compatibility between fuel storage & dispensing equipment and ethanol has increased greatly.

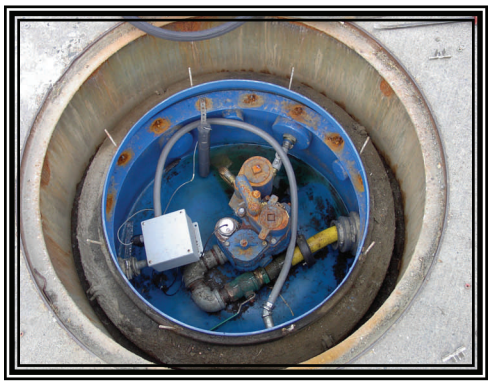
Maine Law requires that UST systems be compatible with the product stored in them. For the most part, compatibility issues have not been a problem for conventional fuels. However, ethanol blends do not have the same compatibility characteristics of conventional fuels when it comes to storage and dispensing equipment.

Ultimately, it is essential that the owner ensures the entire storage and dispensing system (equipment and components) be made ethanol compatible prior to the facility receiving an ethanol blended fuel.

Because materials such as elastomers and polymers used in flex piping may degrade when in contact with ethanol, the Department is concerned with facilities that currently have flexible product piping that is not UL listed for use with ethanol blends.

Recently, it has come to our attention that there may be a significant number of facilities that have first generation Total Containment flex piping still in service. Based on information previously obtained from the manufacturer, this piping was not UL listed for compatibility with ethanol; therefore facilities with this piping should not be dispensing ethanol blended fuel.

When Installers/Inspectors are doing inspections of Total Containment piping the Department recommends identifying the piping for the owner so they know if ethanol blends are compatible with the piping. First generation Total Containment flexible piping is "Enviroflex" and identified by its yellow color.



An example of Total Containment first generation piping. A full color picture can be found at: http://www.maine.gov/dep/rwm/ust/tanksinmaine.htm.

To distinguish first generation flexible piping from the second generation, look for the following:

- Yellow color instead of an off white "bone" or cream color.
- The numbers "PP1500 or PP2500" instead of "PP1501 or PP2501".

The Department also requests Installers and Inspectors to notify us of facilities that have tanks with First generation Enviroflex piping. To do this, you may:

- call 207/287-2651 and ask to speak with Underground Tanks Program staff;
- fax a note to 207/287-7826 addressed to UST program staff; or
- send an e-mail to dep.ust@maine.gov

We thank you in advance for your assistance in identifying these facilities.

Inside this issue:

New AST Facility Siting Restrictions

Governor Baldacci signed An Act to Prevent Contamination of Drinking Water Supplies on April 4, 2008. This new law helps to reduce pollution risks to private and public drinking water supply wells from future development of above ground oil storage facilities (AST's) and from businesses that commonly generate hazardous wastes. This latter group includes junk yards, automobile repair and body shops, metal finishers, dry cleaners using the solvent perchlorethylene, and larger hazardous waste storage facilities. It is also intended to offer additional protection to the future drinking water supplies for Maine towns and cities, our significant sand and gravel aquifers.

Here are more specifics on how this new law affects where new oil AST facilities may be located. The requirements are very similar to those already in effect for siting new underground storage tank (UST) facilities. After September 30, 2008, the law prohibits the installation of new AST facilities in wellhead protection areas unless a variance is first obtained from the Department of Environmental Protection (DEP) Commissioner. The burden of proof and the effort of obtaining a variance rests with the developer and depends on the type of drinking water supply being protected. Community and school public water supply wells, along with private wells, are provided the most protection, because if contaminated, they will result in the greatest human exposure to polluted drinking water. In the case of schools, children are generally more sensitive than adults to exposure to the chemicals found in gasoline, diesel fuel, and heating oil. Note that community drinking water supplies include more than water districts and municipal water departments. They include mobile home parks, nursing homes, and condominium associations.

What is a wellhead protection zone? In the case of a private well, it is the area within 300 feet of the actual well. Private wells include home wells, and wells serving small businesses. No maps are available for private wells. There's no substitute for getting the tape measure out in the field. In the case of a public drinking water supply well, the area from which the well draws water is larger and therefore the wellhead protection zone is larger. A public supply well provides water for human consumption and serves 15 service connections (e.g. homes, housing units, etc.), serves an average of at least 25 individuals daily 60 days of the year or more, or bottles water for sale. The protection zone is the area within 1000 feet of the well, or the "source water protection area" mapped by the Maine Drinking Water Program, whichever is greater.

Maps of "source water protection" are available in many town offices and on the State of Maine website (http://www.state.me.us/dep/gis/datamaps/DWP_Wells/index.htm). If you need assistance on how to use this Google Earth based mapping tool, do not hesitate to contact one of the DEP or Drinking Water Program (DWP) contacts listed below. This web based tool is especially helpful since you can enter the location of a prospective AST facility's tanks, piping runs, and dispensing areas, showing their location on the map, and compare it to the location of any nearby public wells. You can enter either longitude/latitude or UTMs. The maps include a ruler feature to assist with measurements. A word of caution – so-called transient public wells, associated with motels, restaurants and other businesses providing food or beverages to the public, are often just that, transient. They may not always appear on the State maps. Increasingly, common transient public water supply wells are those that serve convenience stores and include a fast food restaurant. Again, canvass the neighborhood of the proposed AST facility site carefully to identify and locate these wells.

If the proposed location of a new facility is within a wellhead protection area, you may apply for a variance from the Commissioner and the Department. If proposing to locate in close proximity to a private well, a school well or a community well, you must demonstrate that there is no hydrogeologic connection between the proposed facility and the water supply well. This is an intentionally rigorous standard to meet, and usually requires conducting a pump test. If within the wellhead protection area of another type of public well (e.g. transient well), a variance may be approved if you propose engineering and leak monitoring measures that exceed current regulatory requirements, and that will effectively minimize the risk of the occurrence of a discharge contaminating drinking water. The variance application procedure is a public process, and includes public notice and an opportunity for public review and comment. Before preparing and submitting a variance application, you are encouraged to arrange a pre-application meeting with the Department to ensure you understand the standards and the Department's expectations of a viable variance application.

The law also authorizes the Department to develop regulations restricting the location of new facilities on significant sand and gravel aquifer's, mapped by the Maine Geological Survey (MGS). Maps are available on-line (http://www.state.me.us/dep/gis/datamaps/DWP_Wells/index.htm) and at the offices of the MGS. The location of mapped sand and gravel aquifers can also be located using the Drinking Water Program maps of public wells. We anticipate these AST siting restrictions will be very similar to those for USTs already in Chapter 691. The restrictions will go into a place only after new regulations have been adopted by the Maine Board of Environmental Protection and reviewed by the Maine Legislature. Consequently, we do not anticipate they will go into effect before the spring of 2009. The Department will keep installers informed of this rulemaking process.

The consequences of installing a new AST facility at a location prohibited by this law can be severe. The Commissioner may, issue an administrative order, to prevent a facility from operating. Facilities located in violation of the law automatically loose their eligibility for State coverage toward the costs of any cleanups or third-party damage claims resulting from a discharge.

If you have general questions regarding this new law you may contact George Seel, Butch Bowie or David McCaskill at (207) 287-2651. Questions about the applicability of the law to a specific, proposed site should be directed to John Dunlap. Assistance using the online public water supply well maps is also available from the above DEP staff in addition to staff from the Maine Drinking Water Program at (207) 287-2070.

New Law Tweaks Inspection Requirements

L.D. 2072, "An Act To Conform the Laws Governing Underground Oil Storage Tanks to the Requirements of the Federal Energy Policy Act" was enacted by the Legislature and signed by the Governor on March 31. It is now, therefore, Public Law 2008, Chapter 534. The law has several implications for installers, inspectors, owners, and operators of underground oil storage tanks.

First, the law clarifies the deadline for submitting inspections to mandate submittal by the owner within thirty (30) days of completion of the inspection. While the inspection year still runs from July 1 to June 30 of the next year, inspections need to be completed within one (1) year of the last inspection, and that inspection is due into the Department within 30 days of its completion. For example, a facility whose last inspection was April 1, 2007 had another inspection due as of April 1, 2008. The 2008 inspection must be submitted to the Department by May 1, 2008.

Second, the law mandates that beginning July 1, 2010 and at least once every three (3) years thereafter, the installer or inspector who inspects the facility cannot also be the owner, operator, or an employee of the owner or operator of the facility. Owners, operators, and employees who are certified can still perform the annual inspections for two (2) of the (3) years in the cycle. Federal mandates made this requirement necessary.

Third, the law provides more detail in its granting of authority for the Department to issue an order to cease deliveries for violations. Applicable facilities are those used for the storage of motor fuel or for the marketing and distribution of oil. Orders can be issued for failure to have spill prevention, overfill prevention, leak detection, or corrosion protection measures required by law or rule; failure to operate in accordance with law or rule; or evidence of an ongoing discharge.

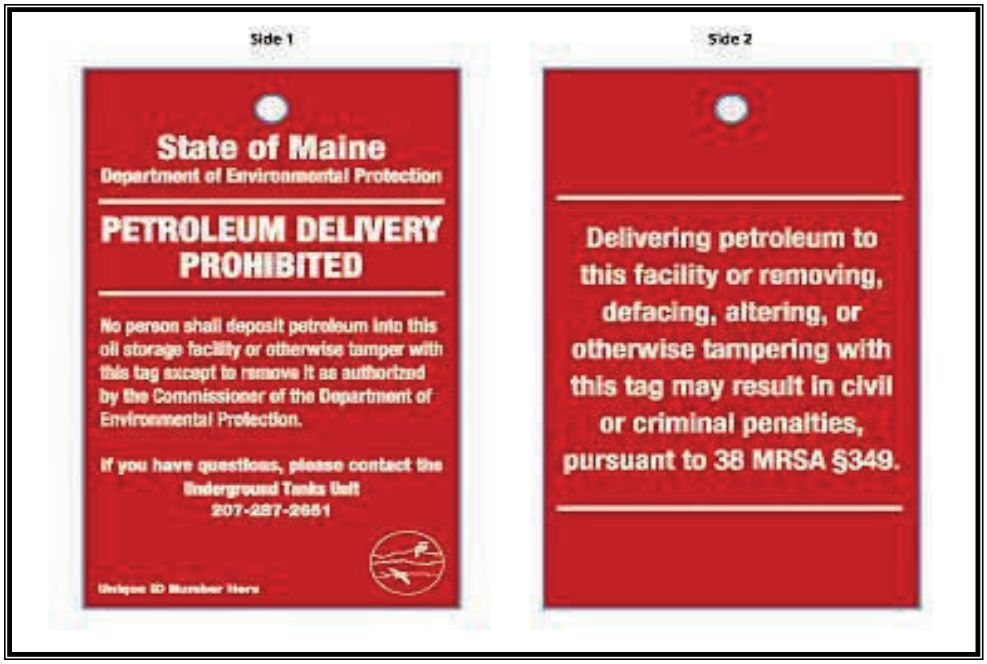
The Commissioner has the authority to defer issuing an order to cease deliveries if he or she determines a delivery prohibition would jeopardize the availability of, or access to, oil in a remote area of the State. This deferral, however, may not exceed 180 days. The Commissioner may or may not allow the owner or operator to dispense any remaining oil in the tank, depending on whether or not dispensing the oil would ease or exacerbate any environmental threat.

The law provides an appeal process for the order to cease deliveries, which begins with a written petition the owner/operator must submit to the Board of Environmental Protection (BEP) within five (5) working days of the owner/operator's receipt of the order. BEP then has fifteen (15) days to hold a hearing, and seven (7) days after that to rule on the appeal. The BEP's decision may be appealed to Superior Court.

Finally, the law requires that whenever an order to cease deliveries is issued, the tank in question be identified with a red tag on the fill pipe. A person may not deposit oil into the labeled tank or tamper with the tag except to remove it when authorized by the Commissioner.

The tag can only be removed if a certified inspector or installer certifies in writing to the Commissioner that the applicable violations have been corrected or if in an emergency situation the removal is in the best interests of the public. At that point the Commissioner can remove the tag or authorize its removal.

In large measure, Federal enactment of portions of "The Energy Policy Act of 2005" (119 Stat. 1093 Public Law 109–58—Aug 8, 2005) is responsible for the need for Maine's law. A portion of this law, entitled "The Underground Storage Tank Compliance Act," codified in 42 U.S.C. 6991, mandates these as minimum provisions a state must have in order to receive Federal funding for its underground storage tank program.



Internet Access to Public Drinking Water Systems Upgraded

Maine's Drinking Water Program recently replaced its system of maps depicting the location of public drinking water supplies with a new system, accessible through the Internet and using for base data the aerial photography of Google Earth. Those who attended the recent State sponsored installer/inspector training on April 4 got a brief tour of this program. Google Earth is free software which can be downloaded to your computer by going to:

http://earth.google.com/

The data are accessible from http://www.maine.gov/dep/data.htm. On that page, there is a link entitled "DEP data on Google Earth Interactive Maps." Once following that link, there are a number of other links. In addition to the "Maine Public Water Resource Information System" link, there are links to data on the locations of spill sites and to the locations of registered underground oil storage facilities.

Users do have to register and receive permission to have access to the public drinking water system data, but it is a relatively painless procedure. We hope this information will be useful to you in that you will be able to relatively quickly determine whether your site may be in a sensitive geologic area or may be subject to any of the siting restrictions against underground or above ground oil storage facilities.

Public Water Resource data can also be accessed through the option of selecting the registered underground oil storage facility data. Once that is open, you can select "View Sidebar," scroll down, and check off "Public Drinking Water Supplies." You will be asked for your registered user id and password. Once that is entered, both storage facility and public drinking water supply data will be visible.

Tools are available to assist you to find locations of interest, zoom in and out to view what you need to view, and measure distances (like say, between the nearest water supply to your facility). It takes some amount of practice to become familiar with how to use this tool, but you'll probably find that the practice is fun.

Welcome Pat Hennesey

Patrick Hennessey says he is very happy to be working with the rest of the DEP Staff, the installers, and the inspectors. But then, he hasn't been here very long. He is the new Environmental Specialist in the Oil Enforcement Unit.

He attended Hobart College in upstate New York and graduated in 2003 with a Bachelor of Arts in Environmental Studies, and a second major in Sociology. His first position in the environmental field started about a year after he graduated when he became a Field Technician at Environmental Projects, Inc., an environmental contractor in Auburn. While a "Tech", he got to see first hand what can happen when oil and other materials are spilled, and what the options for remediation are. He then began working on the disposal side of the company, training to be a Field/Labpack Chemist. This experience eventually moved him into a position where he could run the disposal side of the company as the Disposal Coordinator.

After being on the "reactive" side of the environmental world, and only becoming involved after a spill happened, he decided that he wanted to get involved in a program that helps to keep spills from happening in the first place.

He looks forward to working in the Underground Storage Tank Program, and to working with all of you.

Process for Addressing Uncertified Installers and Inspectors Enacted

This year the Legislature addressed what has been a long standing quandary to the Board of Underground Storage Tank Installers and its staff; how to address an incidence of someone practicing as an installer or inspector when they are not certified. While the historic law made such activity illegal, it did not specify how, or who, would adjudicate it. We assumed it would be a matter for the courts, but were not sure.

Then came an actual instance. The Board had to discipline someone who is now a former installer by first suspending their certificate, then for continued violations, refusing to renew their certificate. The individual continued to "offer" their services to former clients, require half the payment up front, and then disappear. While the Board and its staff eventually successfully addressed the issue, it became obvious some statutory process needed to be specified.

In doing some research, we found other Boards had such a process. The Board proposed to basically apply that process to us with LD 1946, "An Act To Address Uncertified Practice of Underground Oil Storage Tank Installation and Inspection." The act eventually passed and was signed into law as P.L. 2008, chapter 497.

This law grants investigative authority to the Board of Underground Storage Tank Installers, the Department of Environmental Protection, or the Attorney General to address complaints of uncertified practice. If sufficient evidence of uncertified practice is uncovered, the evidence must be compiled and presented to the Attorney General or the local district attorney for prosecution. Prosecution can occur in either District or Superior Court.

If criminal prosecution is pursued, the first violation would be a Class E crime and the second would be a Class D Crime. If civil prosecution is pursued, the minimum penalty is $100 and the maximum $2000 for each violation.

The courts may also issue an injunction to prohibit an individual for continuing to practice without being certified. Violation of such an injunction carries with it a monetary penalty of up to $10,000.

Maine Department of Environmental Protection

28 Tyson Drive
Augusta, ME 04333-0017
Phone: 207-287-2651

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BUSTI Rules Amendments are Final

On February 3, the rules proposed earlier by the Board of Underground Storage Tank Installers (BUSTI) became effective. They included amendments to Chapters 1, 2, and 3 of its rules as well as repeal of Chapter 5.

Legislation enacted and signed in 2007 eliminated BUSTI's responsibility to offer certification for underground gasoline tank removers and the separation between Class 2 and Class 3 installers . The amendments make BUSTI's rules consistent with the current structure of certificates it can offer.

The 2007 legislation also provided BUSTI with more general authority to specify the requirements for apprenticeship in its rules. In May 2006 (see Tanks in Maine, v. 2 Issue 1), we asked for volunteers to help us craft a new apprenticeship program. That group suggested we alter the program to enable applicants to receive credit for more than simply full installations. To that end, we proposed a point system to give varying amounts of credit depending on the complexity of the job.

An applicant must reach a total of 1000 points to complete their apprenticeship. The apprenticeship must include at least one full facility installation of a motor fuel system complete with submersible pumps and continous electronic monitoring for tanks and piping. With such an installation, the apprentice accumulates 300 points. The apprenticeship also must include one (and only one) removal of one or more gasoline tanks at a facility. The removal would count for 100 points.

Six (6) other types of jobs could also be used to obtain the necessary credits. An apprentice could obtain 150 points for either the installation of a motor fuel facility with suction piping and continuous interstitial space monitoring of the tank(s), or for the installation of a heating oil facility for on-site consumption. A piping upgrade could count for 100 points, as could prior certification as an inspector. The installation of a heavy oil facility, including tanks, piping, secondary containment, monitoring, and capability for heating the oil, could be used for 200 points. Finally, retrofit of cathodic protection could receive 50 points.

The final rules are available at http://www.maine.gov/dep/rwm/ust/bustilawsandrules.htm. Jim Hynson can also send you these, if you let him know at 207/287-7889 or at james.r.hynson@maine.gov