Commonwealth of Massachusetts
Executive Office of Energy & Environmental Affairs

Department of Environmental Protection
One Winter Street Boston, MA 02108 • 617-292-5500

DEVAL L. PATRICK
Governor

MAEVE VALLELY BARTLETT
Secretary

DAVID W. CASH
Commissioner

# MassDEP Issues New Underground Storage Tank Rules: 310 CMR 80.00

On January 2, 2015, MassDEP adopted a new Underground Storage Tank Regulation ("UST", 310 CMR 80.00) that addresses design/construction/installation, registration, operation, maintenance and inspection of UST systems used to store petroleum fuels and hazardous substances. These new rules have been developed to implement M.G.L. c 21O, which was established by Section 7 of Chapter 4 of the Acts of 2009. This law also transferred regulation of most aspects of the Commonwealth's UST Program from the Department of Fire Services (DFS) to MassDEP. The new regulation maintains the basic requirements established by DFS's regulation (527 CMR 9.00, which was rescinded on January 1, 2015) and by the U.S. Environmental Protection Agency. MassDEP has also updated and streamlined requirements designed to protect groundwater from UST system leaks.

**What tanks are covered?** MassDEP's regulation applies to UST systems that are covered by M.G.L. c. 21O: tanks and associated piping that have more than ten percent of their volume underground and that hold petroleum products or hazardous substances listed in the U.S. Comprehensive Environmental Response Compensation Liability Act (CERCLA) . Only some of the regulatory requirements apply to other types of underground tanks: e.g., farm and residential tanks holding less than 1100 gallons and storing motor fuel for non-commercial purposes and heating oil for consumptive use on the premises.

**What tanks are not covered?** M.G.L. c 21O exempts certain types of tanks from regulation under this program altogether (e.g., septic tanks). The new regulation also excludes tanks that are excluded from federal regulations: hazardous waste UST systems, wastewater treatment UST systems that are regulated by the U.S. Clean Water Act, equipment or machinery containing regulated substances for operational purposes (e.g., tanks serving hydraulic lifts and electrical equipment), UST systems containing a de minimis concentration of regulated substance, and UST systems holding less than 110 gallons. The regulation also minimally regulates other types of UST systems for which the U.S. Environmental Protection Agency (EPA) has deferred regulation: tanks containing radioactive material, tanks serving emergency generators at nuclear facilities, and wastewater tanks now regulated by the U.S. Clean Water Act.

**What Stays the Same?** The basic principles of the DFS regulation have been carried into MassDEP's regulation. These include requirements that:

- Owners and Operators of UST systems have primary responsibility for ensuring that their UST systems are designed, constructed, installed, operated, and maintained in compliance with the applicable Massachusetts UST regulation;
- All new and replacement USTs and associated piping must be double-walled;
- All single-walled steel tanks must be removed by August 7, 2017;
- All UST systems have equipment in place for early detection of leaks of regulated substances into the environment;
- All UST systems have equipment in place to prevent releases of regulated substances into the environment;
- UST systems are inspected every three years by a Third Party Inspector and the Inspector's report is submitted to MassDEP; and
- Delivery prohibition orders can be issued and take effect immediately for serious violations.

**What's New? New provisions include:**

1. **Design, Construction, and Installation Requirements:**
   - New installation requirements and related recordkeeping:
     - Installations must be inspected by the UST system designer or the designer's designee before the excavation is backfilled [310 CMR 80.16(6)],
     - Owners/Operators must keep records of UST system installations, including installers' certifications, manufacturers' specifications and checklists, records of all testing results and inspections conducted during installation, and a scaled drawing or as-built plan of UST systems installed after January 2, 2015 [310 CMR 80.16(18)].
   - Leak detection for piping installed between January 1, 1989 and May 28, 1999: a new option for leak detection is an annual tightness test coupled with quarterly inspections of secondary containment ports [310 CMR 80.19(4)(b)1.b].
   - Pressurized piping systems must include Automatic Line Leak Detectors by January 2, 2016. [310 CMR 80.04(3) Table A].
   - Turbine, Intermediate and Dispenser Sumps:
     - Tanks using submersible pumps that do not have a turbine sump must install a turbine sump by January 1, 2019, or when the tank top is upgraded (whichever is earlier). Tanks with submersible pumps that do not have a turbine sump after January 1, 2019 must be removed or permanently closed [310 CMR 80.20(3)].
   - Spill Buckets and Overfill Prevention Equipment:
     - Replacement and new spill buckets installed on or after January 2, 2015 must have a minimum capacity of five gallons [310 CMR 80.21(1)(a)].
     - All new and replacement spill buckets must pass a tightness test when they are installed, to ensure that the bucket is liquid tight. The test must use vacuum, pressure or liquid testing, and the regulation establishes a standard for passing a test [310 CMR 80.21(1)(c)].
     - New or replacement ball float valves cannot be used as a primary overfill prevention device after January 2, 2015. Ball float valves installed before January 2, 2015 may continue to be used as the primary overfill prevention device until the valve is replaced. Ball float valves

may be used as secondary overfill prevention devices, but cannot interfere with the operation of the primary overfill prevention device [310 CMR 80.21(2)(a)].
    - Emergency generators and emergency engine-driven pumps installed before January 2, 2015 must be equipped with leak detection. This can take the form of continuous interstitial monitoring, a static in-tank monitoring system, continuous in-tank monitoring, statistical inventory reconciliation, or monthly tank gauging with an annual tank tightness test. Tanks holding 1000 gallons or less can meet this requirement by weekly tank gauging [310 CMR 80.19(3)(d)].

**2. General Operating Requirements**

- New requirements associated with UST registrations:
    - New UST systems and facilities must be registered with MassDEP within 30 days of the UST system's receipt of regulated substance [310 CMR 80.23(1)].
    - Owners may authorize an Operator to sign and submit registration updates to MassDEP.
- Owners/Operators' Testing and Inspections of UST systems [310 CMR 80.26-80.35]:
    - Owners/Operators must periodically test and inspect UST components to ensure that they are operating properly.
    - Monthly inspections can be done by Class A or B Operators.
    - Requirements are also established for periodic monitoring, testing, and inspections of leak detection and leak prevention equipment.
- Owners/Operators of UST systems must respond to failed tests and failures discovered during inspections of UST Components. The regulation prescribes system tests that apply to different types of equipment. Acceptable responses include repairing or replacing the system or UST component, taking the UST system temporarily out-of-service, or removing the UST system [310 CMR 80.33 and 80.42].
- Recordkeeping requirements have been streamlined:
    - Most records need to be kept for four years (rather than for the full life of the UST system).
    - The applicable recordkeeping requirements are listed in each section of the regulation, and a complete list is provided in 310 CMR 80.36.
- New compliance certifications must be submitted to MassDEP by Owners/Operators every three years (these certifications are due 18 months after each Third-Party Inspection). If the UST system is not in compliance with the applicable requirements of 310 CMR 80.00, the submittal must include a "Return to Compliance" Plan or description of how problems have been remedied [310 CMR 80.34].

**3. Requirements for taking an UST system Temporarily Out-of-Service have been clarified (310 CMR 80.42):**

- If an UST system no longer holds any regulated substance but is not being removed, the system must be taken temporarily out-of-service.
- UST systems can remain temporarily out-of-service for up to five years without having to be permanently closed and removed.
- UST systems containing any regulated substance must comply with the applicable requirements of 310 CMR 80.00, including the requirements for periodic monitoring, inspections and testing.

4. **Third-Party Inspection Requirements [310 CMR 80.49]:**
   - Third-Party Inspection reports must be submitted to MassDEP by the UST system Owner or Operator every three years (rather than by the Third-Party Inspector as was required by the MA Dept. of Fire Safety).
   - If a Third-Party Inspection identifies non-compliance with one or more regulatory requirements, the submittal must include a plan to return to compliance.
   - Requirements for Third-Party Inspectors have been enhanced to establish minimum eligibility qualifications. Prospective Third-Party Inspections will also have to pass an examination, complete annual training to maintain their registration, and conduct their work to avoid conflicts of interest.

5. **Financial Responsibility [310 CMR 80.50-63]:**
   - Financial responsibility requirements now apply to UST systems holding hazardous materials, as well as to systems holding petroleum products. Financial responsibility requirements ensure that Owners and Operators have the means to pay for cleanup of releases from UST systems into the environment, if needed.
   - An UST system's registration must be updated to reflect changes in its financial responsibility (e.g., MassDEP must be notified of annual changes in insurance policies). In addition, financial responsibility documents that support a financial test of self-insurance or a corporate guarantee must be submitted to MassDEP.

6. **Delivery Prohibition [310 CMR 80.48]:**
   - MassDEP is required to "red tag" UST systems (preventing the delivery of regulated substance) that are found to lack specific components that are key to preventing leaks and responding to releases. These key components are spill buckets, overfill prevention equipment, corrosion protection, and leak detection equipment.
   - MassDEP is also allowed to "red tag" UST systems where:
     - Spill prevention (e.g., spill bucket) equipment is not operating in accordance with the requirements of 310 CMR 80.28(1) and (2), which establish operation and maintenance requirements for spill buckets;
     - Overfill protection is not being operated and maintained in accordance with the requirements of 310 CMR 80.28(1) and (3), which establish operation and maintenance requirements for overfill protection;
     - Leak detection equipment is not operating in accordance with 310 CMR 80.26, which establishes requirements for leak detection systems;
     - Corrosion protection equipment is not operating in accordance with 310 CMR 80.29, which establishes requirements for corrosion protection;
     - The Owner or Operator of the UST system fails to demonstrate or maintain financial responsibility in accordance with 310 CMR 80.51-80.63; or
     - Any other violation of 310 CMR 80.00 that poses a significant threat to public health, safety or the environment, as determined by the Department at its sole discretion.
   - MassDEP is required to provide UST system Owners and Operators with a written notice of its intent to serve the UST facility with a "Delivery Prohibition Order" for the violations identified above, and must issue the Delivery Prohibition Order at least 24 hours after providing the written notice. MassDEP will install a red tag on the UST system after the Delivery Prohibition Order has been served.

- MassDEP will inspect the UST system within 24 hours of being notified that the violations have been addressed, and will remove the red tag if the violations have in fact been remedied. If MassDEP does not inspect the UST system within 24 hours of being notified that the violations have been remedied, a Third-Party Inspector may remove the red tag after filing a certification with MassDEP that the violations have been remedied.

**For more information about the MassDEP Underground Storage Tank Program:**

- Visit MassDEP's web site for the final regulation, associated documents about implementation, and a schedule of MassDEP workshops about the new program: http://www.mass.gov/eea/agencies/massdep/toxics/ust/newregs.html
- Call the UST/Stage I & II Hotline: 617-556-1035