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BACKGROUND DOCUMENT
ON PROPOSED AMENDMENTS TO

310 CMR 80.00
UNDERGROUND STORAGE TANK SYSTEMS

5/27/21

Statutory Authority: Massachusetts General Law, Chapter 21O

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I. SUMMARY

In Massachusetts, approximately 3,700 facilities use 9,600 underground storage tanks (UST) to store the hazardous substances and petroleum products sold or used in industrial processes and to fuel vehicles and equipment. More than 2,300 of these facilities are retail gasoline stations or intermediate distributers of petroleum fuels. USTs are also found at airports, hospitals, schools, military bases, golf courses, and federal, state, and local government facilities, as well as large and small businesses that need to store hazardous substances and fuel. Approximately 90% of Massachusetts USTs hold petroleum products such as gasoline, diesel and waste oil, and the rest hold hazardous materials – most commonly acids, bases, and solvents.

II. BACKGROUND

USTs have been recognized in Massachusetts as a potential threat to groundwater and surface water quality since 1919, when the Legislature authorized the Department of Fire Services (DFS) to promulgate rules and regulations regarding the construction, use and maintenance of USTs.

In 1993, the United States Environmental Protection Agency (EPA) delegated authority to Massachusetts, through DFS and the Massachusetts Department of Environmental Protection (MassDEP), to implement and enforce the federal UST program. DFS had responsibility for that part of the program designed to prevent USTs from leaking, including the installation, operation and maintenance of UST systems. MassDEP was responsible for ensuring that leaks from USTs into the environment were reported, assessed, and cleaned up properly.

In July 2009, most of the UST program overseen by DFS was transferred to MassDEP pursuant to section 7 of chapter 4 of the acts of 2009. Under the authority in that legislation, MassDEP regulated and enforced the UST program with the DFS regulations at 527 CMR 9.00. In January 2015, MassDEP promulgated its own UST regulations at 310 CMR 80.00 and DFS rescinded 527 CMR 9.00. Certain UST requirements related to public safety, such as the permit to remove a UST, remain with DFS in the Fire Code at 527 CMR 1.00. MassDEP submitted 310 CMR 80.00 to EPA for State Program Approval in June 2016 and received approval on September 16, 2019.

State regulations for EPA delegated UST programs, such as Massachusetts', must be no less stringent than the EPA regulations in order for EPA to issue a State Program Approval (SPA) for requested program delegation.

Effective October 13, 2015, EPA amended the EPA UST regulations at 40 CFR 280 and 281 requiring delegated states to promulgate amended regulations and submit to EPA a SPA Application requesting program delegation within three years of the effective date of the amended EPA regulations (i.e., on or before October 13, 2018) and require certain sections of the amended state regulation to be effective no later than October 13, 2021. To be no less stringent than the EPA requirements, MassDEP is proposing a compliance deadline of October 13, 2021 for certain new EPA requirements applicable to emergency engine tanks and airport hydrant systems.

Some of the key changes to the EPA UST regulations are:

- Testing requirements for leak detection, sumps, spill buckets, and overfill protection

- Periodic inspection of UST components
- Compatibility requirements for UST systems and the regulated substance they contain
- New requirements for certain USTs that EPA deferred from regulation in the past (airport hydrant systems and USTs that support emergency generator systems)
- Removal of past deferrals of certain USTs

EPA also added requirements for operator training and secondary containment for tanks and piping, but MassDEP had already incorporated those requirements into its regulations.

In addition to updating the UST regulations to comply with new EPA UST regulations, MassDEP is proposing certain regulatory changes to clarify and enhance its UST program requirements.

III. DESCRIPTION OF PROPOSED AMENDMENTS

A. Regulation Development Process

Beginning in October 2017, MassDEP held three UST stakeholder meetings where adoption of the new EPA UST Program requirements and other changes to the Massachusetts UST regulations were discussed. Based on the feedback received from those meetings, MassDEP prepared the proposed amendments to 310 CMR 80.00.

B. Overview of Proposed Amendments to 310 CMR 80.00

The key changes MassDEP is proposing based on the amendments to the EPA UST regulations are:

- Testing requirements for leak detection, sumps, spill buckets, and overfill protection
- Periodic inspection of UST components
- Compatibility requirements for UST systems and the regulated substance they contain
- New requirements for certain USTs that EPA deferred from regulation in the past (airport hydrant systems and USTs that support emergency generator systems)

In addition to updating the UST regulations to comply with new EPAUST regulations, MassDEP is proposing certain regulatory changes to clarify and enhance its UST program requirements. The major changes that MassDEP is proposing are:

- Removing the requirement for a triennial compliance certification and adding a one-time General Permit
- Enhancing installation requirements
- Exempting sumps that will not hold regulated substance from inspection and testing
- Changing the requirements for the third-party inspection program to allow more individuals to be eligible to become third-party inspectors, but slightly enhancing the requirements for maintaining the certification

1. Amendments Based on New EPA UST Regulations

As stated above, MassDEP's UST regulation must be at least as stringent as EPA's regulations in order to be approved. MassDEP is proposing the following amendments to 310 CMR 80.00 to be consistent with and as stringent as the new EPA regulations.

Definitions

- The definition of "compatible" was updated to mean "that two or more substances maintain their respective physical and chemical properties upon contact with one another under conditions encountered within or around an underground storage tank system for the design life of that system."

Upgrades to UST Systems

- Upgrade leak detection for UST Systems used to supply fuel to emergency engines installed before January 2, 2015 to comply with subpart D (40 CFR 280.10(a)(1)). Under the current regulations, emergency engines can use manual tank gauging as leak detection, but that is not allowed under the EPA regulations. The upgrade must be to a continuous interstitial monitoring system, an in-tank monitoring system, a continuous in-tank detection system, or statistical inventory reconciliation. UST Systems used to supply fuel to emergency engines installed after January 2, 2015 already meet the new leak detection requirements. [310 CMR 80.04(3)]
- Require airport hydrant systems to comply with 40 CFR 280.251 and 280.252. MassDEP is proposing to add a new section at 310 CMR 80.64 to set forth the new requirements for airport hydrant tanks, which are not currently regulated under 310 CMR 80.00. Currently, airport hydrant tanks are not regulated by MassDEP so the new section incorporates installation, operation, maintenance and financial responsibility requirements. There are several upgrade requirements, some of which take effect immediately and some which must be complied with on or before October 13, 2021. In addition, Owner and Operators of airport hydrant systems are required to register and demonstrate financial responsibility. [310 CMR 80.04(3) and 80.64]

Piping

- MassDEP is proposing to require that metal piping that has had leakage or release be replaced to comply with 40 CFR 280.33(c). [310 CMR 80.33(3)(a)]

Leak Detection

- MassDEP is proposing to incorporate specific leak detection annual tests depending on the type of leak detection to comply with 40 CFR 280.40(a)(3)(i)-(iv). [310 CMR 80.26(2)]

Sumps

- MassDEP is proposing to require sumps be tested every three years to comply with 40 CFR 280.35. Under MassDEP's current UST regulations, all sumps were required to be tested once, by January 2, 2015. EPA is only requiring those sumps that support interstitial monitoring for piping to be tested. MassDEP is proposing to keep the current universe of sumps that have to be tested almost the same as it is now in that all sumps have to be tested, but MassDEP is proposing to exempt those sumps that only contain single-wall siphon bar piping systems with no connections and/or European suction piping systems from testing. This is because if leakage occurs within these piping systems, all regulated substance(s), by design, will drain back into the

USTs and will not drain to those sumps. MassDEP is also proposing to adopt EPA's testing exemption at 40 CFR 280.35(a)(1)(i) for double-walled sumps that have the integrity of both walls periodically monitored. [310 CMR 80.27(7) and (8)]

- Pursuant to 40 CFR 280.35(a)(1)(ii), the test for sumps that support interstitial monitoring for piping must be: (1) based on requirements developed by the manufacturer, (2) a code of practice developed by a nationally recognized association or independent testing laboratory, or (3) no less protective than (1) or (2). EPA guidance provides an example of testing a sump with a liquid level sensor that is no less protective than PEI/RP 1200-17. Pursuant to the guidance, the test is performed by adding liquid to the sump until the sensor is activated, then the sensor turns off the submersible pump (if it is a turbine sump), or in the case of dispenser sumps, the sensor turns off the dispenser. This dispenser provision only applies if the facility is staffed when the dispensers are operational. MassDEP is proposing to adopt the same standard for sumps that support interstitial monitoring for piping. For all other sumps equipped with a sensor and not otherwise exempt from sump testing, MassDEP is proposing to keep the current sump test standard of testing to the level that activates the sensor. [310 CMR 80.27(7)]
- For sumps without sensors, MassDEP is proposing to allow testing in accordance with PEI RP1200-19. EPA is allowing this standard through guidance based on the PEI/RP 1200-17. Currently, MassDEP requires hydrostatic testing to the top of the sump. [310 CMR 80.27(7)(d)] Under the current regulations, facilities installed before March 21, 2008 without under dispenser containment (i.e., dispenser sumps) are required to install a dispenser sump with continuous monitoring for liquids when both the dispenser and the piping used to connect the dispenser to the UST are replaced. Per 40 CFR 280.20(f), MassDEP is proposing to amend the current regulations to require, after the effective date of these regulations, the installation of a dispenser sump with continuous monitoring, upon replacement of the dispenser and related components connecting the dispenser to the underground piping. [310 CMR 80.20(1)

Spill Bucket and Overfill Prevention Equipment

- Under MassDEP's current UST regulations, spill buckets are required to be tested by January 2, 2017 and every five years thereafter. MassDEP is proposing to adopt the EPA requirement that spill buckets be tested every three years to comply with 40 CFR 280.35. In 40 CFR 280.35(a)(1)(i), EPA exempts from testing double-walled spill buckets that have the integrity of both walls monitored every thirty days and MassDEP is proposing to adopt that exemption. [310 CMR 80.28(2)(f)]
- 40 CFR 280.33(f) requires that spill buckets and overfill prevention equipment be tested within 30 days of repair. MassDEP is proposing that spill buckets and overfill prevention equipment be tested before being brought back into service to ensure that it is properly repaired before it is used again, thereby avoiding potential overfills or leaks/releases as a result of improperly repaired spill buckets and/or overfill prevention equipment. [310 CMR 80.28(2)(g)3. and 80.28(3)(b)]
- MassDEP's current UST regulations require annual inspection and testing of the overfill prevention equipment in accordance with the manufacturer's specifications, and if there are no manufacturer's specification, test and inspect annually. EPA regulations require inspection and testing of the overfill prevention equipment once every three years in accordance with the manufacturers' specifications or in accordance with a code of practice developed by a nationally recognized association or independent testing laboratory. MassDEP is proposing to amend the current overfill prevention equipment inspection and testing requirement to include EPA's language allowing inspection and testing "in accordance with a code of practice developed by a

nationally recognized association or independent testing laboratory". This proposed amendment is consistent with EPA's adopted testing protocols. MassDEP is not proposing to amend its annual overfill prevention equipment requirement to mirror EPA's triennial inspection and testing requirement. Annual inspection and testing more effectively ensures such equipment is correctly installed and maintained. [310 CMR 80.28(3)(a)]

- MassDEP is proposing to require that the transfer operation of regulated substance is monitored constantly to prevent overfilling and spilling to comply with 40 CFR 280.30(a). [310 CMR 80.28(4)]

Compatibility and Lining

- MassDEP is proposing new requirements for the Owner or Operator to demonstrate compatibility of regulated substance containing greater than 10% ethanol or greater than 20% biofuel with the UST system and components to comply with 40 CFR 280.32(b). Records to show compatibility shall be kept by the Owner or Operator. A change-in-product to one of these regulated substances must be reported to DEP at least 30 days prior to the change. [310 CMR 80.30(3) and 80.41(3)]
- MassDEP is proposing to require that tanks that were internally lined on or before January 2, 2015 be internally inspected in accordance with a code of practice developed by a nationally recognized association, within 12 months of the effective date of the regulations, and every five years thereafter, to determine whether the tank is structurally sound and the lining still performing in accordance with the original design specifications to comply with 40 CFR 280.21(b)(1)(ii). MassDEP already has a standard that tanks, after January 2, 2015, are not permitted to be lined or relined. [310 CMR 80.24(6)]

Periodic Inspections

- MassDEP is proposing to incorporate new requirements for periodic inspections at 310 CMR 80.35.
    - For Owner and Operators to comply with 40 CFR 280.36(a)(1)(i)(A), add requirements that the fill pipe within a spill bucket is inspected for obstructions and that any obstructions are removed and that fill pipe caps are secure. MassDEP also is proposing to require that for double-walled spill buckets with interstitial monitoring, Owners and Operators ensure there is no leak in the interstitial area.
    - Clarify that leak detection equipment must be inspected to comply with 40 CFR 280.36(a)(1)(i)(B) to verify that it is operating with no alarms or other unusual operating conditions and that records are current and being reviewed.
    - Add a requirement to annually check for operability and serviceability of hand-held release equipment to comply with 40 CFR 280.36(a)(1)(ii)(B).

2. MassDEP Amendments

The following is a list of proposed changes to 310 CMR 80.00 intended to clarify applicable requirements, simplify program compliance, and improve overall program effectiveness.

Definitions [310 CMR 80.03]

- MassDEP is proposing to define terms that are used in the current regulations to clarify for the regulated community what MassDEP means when using these terms:
    - Field-constructed tank

  - Flow-through process tank
  - Hydraulic lift tank
  - Routine maintenance – this term was inadvertently left out of the 2015 regulations by the Secretary of State
  - Septic tank
  - Siphon line
  - Storm water or wastewater collection system
  - Surface impoundment
- Define terms that MassDEP is proposing to add to the regulation:
  - Abandoned – Incorporate the concept of an abandoned tank into the regulations using a similar definition from the Fire Code, but vary it slightly, to include those tanks that do not dispense regulated substances.
  - Airport hydrant fuel distribution system – Incorporate requirements for airport hydrant fuel distribution systems to comply with EPA regulations. The definition is EPA's definition with slight modifications.
  - Emergency engine – This is a new term, which is replacing the term "emergency generators or emergency engine driven pumps." This definition is from MassDEP's air pollution control regulations at 310 CMR 7.00.
  - Prior to commencing operation – This is a new term to describe when an action (i.e., tests, inspections) needs to take place.
- Delete definitions for terms that MassDEP is proposing to no longer use:
  - Out-of-use – This term was used to define UST systems that were temporarily out-of-service for over five years. The terms caused some confusion, so MassDEP is proposing to retain the concept of "out-of-use" but refer to it as an "UST system that has been temporarily out-of-service for more than five years."

Installation

- New requirements to improve oversight of UST system installations.
  - Under the current regulations, UST systems must be installed by a person certified by the manufacturer to install that type of tank and piping and the installer must certify the UST system was installed in accordance with manufacturer's specifications and the manufacturer's installation checklist. UST System Owners or Operators are required to maintain copies of applicable installation documentation. The proposed requirement is to have the Owner submit copies of those certifications to MassDEP so MassDEP can be certain these requirements are being met. [310 CMR 80.16(1)(c) and 80.23(1)(b)]
  - Under the current regulations the UST system installer or a registered professional engineer is required to inspect all new UST system installations prior to backfilling (burying the UST system) to verify the installation complies with all applicable requirements and to prepare a set of drawings or as built plans. MassDEP is proposing that the final inspection prior to backfill, and the as-built plans, be completed by a Massachusetts Licensed Professional Engineer (PE) to avoid potential conflicts of interest. Under the current regulations, the person that installed the UST system can conduct the final inspection, thereby inspecting their own work. A PE is licensed by the Commonwealth and is required to follow the Rules of Professional Conduct at 250 CMR 5.02. One of those rules is that a PE "shall practice only in areas of competence for which the Registrant is qualified by education and experience." 250 CMR 5.02(2)(a). [310 CMR 80.16(6) and (7)]

<u>Request for Comment</u>: MassDEP is seeking comment on all aspects of the proposed regulations, but specifically requests comment on whether there is another "third party" that it should consider to inspect UST installations and review and sign off on site as-built plans.

- MassDEP is proposing to change the tests for tanks and piping that are required at installation. The current test requires piping to be tested empty, prior to burial, and to meet the tightness test standards for piping at 310 CMR 80.32. Currently, there are no testing companies that can meet this standard in the United States. MassDEP issued an enforcement discretion directive in June 2015 to allow piping to be tested containing a regulated substance. Recognizing, the inability to test to this standard, MassDEP is proposing to use the standard from the now-repealed DFS regulation for testing at installation – air testing the tank and piping prior to burial and tightness testing the tank and piping after burial, without the requirement that the UST system be empty. MassDEP is also proposing that the Owner or Operator provide the test results of the PE who is conducting the inspection pursuant to 310 CMR 80.16(6) [310 CMR 80.16(4) and (5)]
- Requirements for installation of a "tank within a tank." There are new technologies that make it possible for a tank to be installed inside an existing tank. MassDEP currently allows installation of these tanks now, on a case-by-case basis, if they meet current installation requirements. Installing a "tank within a tank" is not the same as lining a tank. Lining a tank entails the application of a material onto the inside of a tank to extend the life of the tank so it can remain in use. The lining provides an additional layer of material that prevents weak spots on the existing tank from continuing to corrode/wear. The material that is applied does not have structural integrity in and of itself, but rather is a coating applied to the interior of a tank. This coating relies on the structural integrity of the existing tank wall to function. A lining in a tank does not provide structural support. The installation of a "tank within a tank" is building a new doubled-walled tank, with an interstice that can be continuously monitored, inside an existing tank. If the existing tank corrodes and begins to disintegrate, the new double-walled tank retains it structural integrity and continues to function as a double-walled tank. It is UL listed to maintain its structure even if the original, existing tank corrodes away. MassDEP is proposing to adopt the following requirements for installation of "tank within a tank":
    - A tank may be installed inside an existing tank if the new tank is "listed", double-walled, and it does not rely on the existing tank for structural support or to be one of the tanks walls. [310 CMR 80.16(1)(d) and 80.17]
    - Prior to installation, all the liquid and solid material must be removed from the existing tank and the Owner or Operator must conduct an assessment to ensure there has been no release of regulated substance(s) to the environment. If the assessment finds contamination that requires notification under 310 CMR 40.0300, the new tank shall not be installed until the notification has been made to MassDEP and any required response action has been conducted. [310 CMR 80.16(1)(d) and 80.44]
    - After the installation, the Owner or Operator must notify MassDEP of the installation of the new tank within 30 days and submit the assessment. [310 CMR 80.16(1)(d) and 80.44]
- MassDEP is proposing to delete the requirement that piping must be installed in a trench between the tank area and the pump island because not all UST systems have pump islands. [310 CMR 80.16(11)]

Leak Detection

- Under the current regulations, sensors for interstitial monitoring of piping are required to be installed in accordance with manufacturer's specification. MassDEP is proposing to add language that if there are no manufacturer's specifications, sensors must be placed at the lowest point in the sump, to account for sensors that do not have manufacturer's specifications. [310 CMR 80.19(4)(a)1.a.]
- MassDEP is proposing to amend the standard by which an Owner or Operator can show that a piping system is a European suction system and not a non-European suction system. The current standard is based on the fact that a dispenser is present, and not all UST systems have dispensers. The proposed language states that if the Owner or Operator cannot demonstrate to the satisfaction of the Department that the system "is sloped back to the tank and that its one check valve is installed in a manner to prevent fuel from remaining in the piping system while the pump is not active," it shall be considered a non-European suction system. [310 CMR 80.26(11)]
- Gravity-fed piping systems are not allowed to be installed in Massachusetts, but there are pre-1989 systems that are still installed and in operation. MassDEP is proposing to allow these old gravity-fed systems that do not have secondary containment to be tightness tested annually to comply with leak detection requirements because they likely will not be able to perform another type of leak detection. This is also an option for pre-1989 non-European suction systems without secondary containment. [310 CMR 80.19(4)(c)1.d. and 80.26(10)]

Sumps

- The current regulations require that sumps installed after March 21, 2008 must be continuously monitored using a sump sensor. MassDEP is proposing to exempt sumps from that requirement if they only contain a single-walled siphon bar or only contain a European suction system because regulated substance(s) will not enter sumps containing only these types of equipment. [310 CMR 80.20(3)] Similarly, MassDEP is proposing to exempt these sumps from inspection and testing requirements as detailed above. [310 CMR 80.20(5), 80.27(6), 80.27(8) and 80.27(9)]
- Turbine sump manhole covers installed after January 2, 2015 had to be designed so that water channels away from the cover. MassDEP is proposing to add language to clarify that the paved surface must be crowned to protect the sump in traffic areas. This is to ensure that manhole covers do not protrude too far out of the ground as to be damaged by a motor vehicle. This is not an issue where there is no motor vehicle traffic. [310 CMR 80.20(6)]
- The current regulations require that sumps with sensors can be inspected annually, instead of every 90 days, if the sensors are correctly placed and tested annually, and the Owner or Operator responds to alarms. MassDEP is proposing to allow sumps with correctly installed and operating sensors to be tested annually without the qualifications. This is a more straightforward standard that is easier to implement but provides comparable protection for the environment. The requirement for correctly placed sensors and response to alarms are required elsewhere in the regulations. [310 CMR 80.27(6)(b)]
- MassDEP is proposing to add a requirement that sump covers be free of cracks and holes and manhole covers be in good condition, tight fitting and impede water infiltration into the sump. The sump cover standard is similar to the spill bucket cover standard. It is important that these covers are maintained so that water does not get into the sump or spill bucket. The same is true for manhole covers, but some of them have handgrips for pulling them up that may be considered a "hole", so the standard is slightly different. [310 CMR 80.27(4)]

Spill Buckets and Overfill Prevention Equipment

- Under the current UST regulations, all UST systems are required to have a spill bucket, implying that product fill ports and vapor return ports, if installed, are required to have a spill bucket. MassDEP is proposing to change the current language to clarify that only product fill ports are required to have a spill bucket under 310.CMR 80.00. [310 CMR 80.21(1)]
- MassDEP is proposing to clarify the requirement that high level alarms have to be visible and audible *to the regulated substance deliverer*. There are systems that are only visible and audible inside and not to the person outside who is delivering the regulated substance. [310 CMR 80.21(2)(b)2.a.]
- MassDEP is proposing to require spill bucket covers installed after the effective date of the regulation be designed and installed with a final grade that channels storm water away from the spill bucket. This is the same standard as for sump covers and will help to prevent water from entering the spill bucket. [310 CMR 80.21(1)(d)]
- MassDEP is proposing that if Owners and Operators inspect or test overfill prevention equipment based on the manufacturer's specifications, the Owner or Operator must keep records of those specifications. It is important that MassDEP inspectors and third-party inspectors have access to these specifications to determine that the inspections and tests were conducted correctly. [310 CMR 80.28(3)(c)2.]

Tightness Testing

- MassDEP is proposing that the standard for tightness testing be 0.1 gallons per hour with a probability of detection of no less than 95%. This was the standard in the UST regulation until January 1, 2018 when it changed to 0.05 gallons per hour with a probability of detection not less than 95%. By enforcement discretion, MassDEP kept the standard at 0.1 gallons per hour because after promulgation of the regulation testing companies provided MassDEP with information that they were not able to calibrate equipment to be capable of detecting a release of 0.05 gallons per hour with a 95% probability of detection. This previous requirement was found at the former 310 CMR 80.32(1)(b), which has been deleted in the draft regulations.

Registration, Reporting and Recordkeeping

- In the current regulations, UST systems subject to the registration requirement must register within 30 days of receiving regulated substance(s) into the UST system. MassDEP is proposing that emergency spill and overflow containment UST systems be registered within 30 days of installation because they may not receive regulated substance for months or years after being installed. Existing emergency spill and overflow containment UST systems would have a year to register the tanks if they are not already registered. [310 CMR 80.23(1)]
- MassDEP is proposing to add language to the regulation requiring Owners, prior to transferring an UST facility, to provide MassDEP with information about the new Owner. Currently the requirement to provide updated information resides with the new Owner and MassDEP is not being notified in a timely manner, if at all. [310 CMR 80.23(5)]
- MassDEP is proposing to specify what types of records must be kept for each leak detection system. This will clarify for the regulated community what specific records they are required to keep. MassDEP is also clarifying that the Owner or Operator must keep records of investigations that result from an indication of leakage or release. [310 CMR 80.26(3)(e), (4)(c), (5)(f), (6)(f), (7)(d), (8)(d), (9) and 80.36(1)(f).]

- Currently records of Class A, B, and C operators must be kept for two years after the operator is no longer designated. MassDEP is proposing to change the requirement so that records only need to be kept while the operator is designated to reduce unnecessary recordkeeping. [310 CMR 80.36(2), 80.37(7)(d), (7)(f), (8)(d) and (8)(f)]
- MassDEP is proposing that the Owner or Operator keep closure records for four years or submit the records to the Department. Under the current regulations, the closure records must be kept by the Owner or Operator until the UST system is closed so once it is closed there is no mechanism for keeping the records for any period of time. [310 CMR 80.36(8)]

Change-in-product and Closure

- MassDEP is proposing to revise who must make the determination for closing a UST system in-place from a "registered" professional civil or structural engineer to a "licensed" professional civil or structural engineer, because Massachusetts now licenses professional engineers. MassDEP is also proposing to require that a scaled site plan and schedule for completion of the closure in place be submitted with the application to close a tank in place so MassDEP knows where the tanks are going to be buried and will know when the work will be completed. [310 CMR 80.43(3)(a)1.]
- Under the current regulations, if a UST system is closed in-place, the Owner or Operator must conduct an assessment before permanent closure is completed and the assessment submitted to MassDEP with the closure in-place notification, within 30 days of closure. MassDEP is proposing that if a UST system is to be closed in-place, the Owner or Operator must conduct the assessment before commencing to fill the UST system. If any contamination is found requiring notification under 310 CMR 40.300, the filling of the UST system will not commence until the Owner or Operator complies with the notification requirements and any response actions, if necessary. [310 CMR 80.43(3)(b)]
- MassDEP is proposing to be able to require the removal or closure in-place of a UST system that has been "abandoned." The proposed definition of abandoned is "an UST system that is not in operation for a continuous period of at least one year and is not temporarily out-of-service in accordance with 310 CMR 80.42." *See* 310 CMR 80.03, Definitions. This change makes MassDEP's UST regulation consistent with the current Massachusetts Fire Code that requires UST systems that have been abandoned for a continuous period of 12 months ("without use, either filling or drawing off") to be removed. The MassDEP definition of "abandoned" is slightly different to account for UST systems that do not regularly fill or remove regulated product from the tank. [310 CMR 80.43(5)]

Third-party Inspections

- The current regulations state that if a third-party inspection report is submitted early, a new compliance date will be established. MassDEP is proposing to define "early" as more than 30 days before the UST facility compliance date. [310 CMR 80.49(2)(e)]
- Currently, third-party inspectors must renew their certification once every five years. To renew their certification, third-party inspectors must complete annual training. MassDEP is proposing to strengthen the third-party inspector certification by reducing the certification period from five years to three years and require third-party inspectors to complete six third-party inspections during the three-year certification period. In addition, the annual training may include a field component. The three-year certification period is also more consistent with the other third-party inspection states (Maine, Maryland, Alaska, and Utah which are every two

years and Pennsylvania which is every three years). [310 CMR 80.49(4)(a)1.a. and 310 CMR 80.49(4)(d)]

- Currently, in order to be eligible to take the MassDEP third-party inspector examination to be a MassDEP certified third-party inspector, an individual must have at least five years of experience in UST installation and/or operation and maintenance (two of those years may be substituted by a BA or Associates in science or engineering) and have one of the following: (1) participate in a least ten inspections with a certified TPI; or (2) hold a third-party inspector certification from another state. If an individual meets the eligibility requirements, s/he may take the MassDEP examination that tests the requirement of 310 CMR 80.00. MassDEP is proposing to change the requirements to become a certified MassDEP Third-Party Inspector as follows: Take and pass MassDEP Third-Party Inspector examination; and demonstrate experience by one of the following: (1) possess 3 years of field experience in UST installation and/or operation and maintenance; (2) participate in a least ten inspections with a certified TPI; or (3) hold a current third-party inspector certification from another state and have performed at least ten inspections in that state within the past three years. This language clarifies that the MassDEP examination can include material beyond the requirements contained in 310 CMR 80.00 which is relevant to being a third-party inspector. The change in the requirement for field experience from five years to three years may allow more individuals to become certified inspectors. Overall, MassDEP would like to provide the opportunity for more people to become third-party inspectors, but the increase the requirements for maintaining the certification. [310 CMR 80.49(4)(b)]

Financial Responsibility

- Under the current financial responsibility requirements for a Trust Fund, the Owner or Operator shall send an original signed duplicate of the trust agreement to MassDEP. MassDEP is proposing to delete this submittal requirement as it is not required for any other financial instrument except financial test and corporate guarantee. [310 CMR 80.54(5)(a)]
- The financial test of self-insurance includes a table to demonstrate whether this financial assurance mechanism covers certain sections of 310 CMR 30.0000 (Massachusetts hazardous waste regulations). MassDEP is proposing to revise the table to require demonstration of level of coverage for sections of RCRA, not 310 CMR 30.0000 because MassDEP hazardous waste regulations do not allow financial test of self-insurance. This change also mirrors the EPA requirement for this financial assurance mechanism at 40 CFR 280.95. [310 CMR 80.54(10)(d)]

Other

- Currently, consumptive use tanks installed before January 1, 1989, having a capacity of more than 1,100 gallons, are subject to the Installation Requirements at 310 CMR 80.16 and the Tank Specification requirements at 310 CMR 80.17(1). MassDEP is proposing to delete these requirements for consumptive use tanks as the requirements were not in effect at the time the tanks were installed and it is not MassDEP's intention to require these tanks to be retrofitted to comply with the referenced installation and tank specification requirements. [310 CMR 80.04(10)]
- MassDEP is proposing to require that consumptive use tanks over 1,100 gallons be subject to General Requirements at 310 CMR 80.24. These are requirements that relate to important operation and maintenance functions such as keeping electric equipment in working order and responding to alarms that indicate a leak or release. MassDEP is not proposing to include 310

CMR 80.24(4) because that is a requirement for gasoline dispensing facilities and distribution terminals. [310 CMR 80.04(10)(d)]

- Currently, there are only three types of piping systems allowed to be installed: pressurized piping, European suction, and non-European suction systems. MassDEP is proposing to clarify that a combination of the referenced piping systems may be installed. [310 CMR 80.18(1)]
- Currently, tanks that have had a release or leakage of regulated substance must be closed in-place or removed unless certain requirements are complied with and the tank passes a tightness test. MassDEP is proposing to clarify that the tank must pass the required tightness test *before* the tank is brought back into service. This is to ensure the tank is tight before it is operational again. [310 CMR 80.33(1)(a) and (2)(a)]
- MassDEP is proposing to replace the triennial Compliance Certification requirement with a one-time General Permit. The Compliance Certification is a mechanism to reinforce applicable system operation and maintenance, record keeping and reporting requirements with UST system Owners and Operators. MassDEP believes the program goals would be more efficiently and effectively achieved by adopting a one-time General Permit that addresses regulatory requirements going forward. As proposed, new Owners will submit the one-time General Permit at the time of new facility registration or the transfer of facility ownership. For existing UST facilities that are registered, the Owner would be required to sign and submit a General Permit on or before the due date of its next third-party inspection. The one-time General Permit is a less onerous requirement on Owners but provides the Owner with an overview of its responsibilities under the regulations, as it is taking ownership of the UST facility. MassDEP anticipates that this requirement will result in less noncompliance and enforcement than the compliance certification requirement. [310 CMR 80.34]
- Currently, under the delivery prohibition section, if MassDEP confirms that the violations have been corrected, it will "rescind" the delivery prohibition order. MassDEP is proposing to replace "rescind" with "terminate," as that is how MassDEP handles orders that have been complied with. [310 CMR 80.48(9)]

IV. IMPACTS OF PROPOSED AMENDMENTS

A. Economic Impacts

MassDEP is proposing amendments to 310 CMR 80.00 to comply with EPA requirements adopted to protect public health and the environment by ensuring UST systems are correctly installed, operated and maintained. MassDEP is proposed additional amendments to 310 CMR 80.00 to complement EPA's requirements by clarifying program reporting and submittal requirements, repealing certain requirements and promoting the introduction and use of new systems and components with the potential to reduce system owner/operator costs.

On balance, compliance with proposed amendments are within current program compliance activities and will not require capital investment or undue ongoing costs. The proposed EPA requirement to test sumps and spill buckets every three years will have an added cost to UST Owners and Operators. The cost for testing spill buckets is about $100 per bucket. The cost for testing sumps is about $250 to $275 for a turbine or intermediate sump and $150 for a dispenser sump. The increased frequency of system testing combined with improved periodic inspections and related system maintenance, will ensure the UST systems continue to operate properly and decrease the likelihood of releases to the environment and costly expenses of any remediation activities that may result.

The Owners and Operators of UST systems used to supply fuel to emergency engines and airport hydrant systems tanks may have to upgrade their UST systems to comply with the new requirements by October 13, 2021. Depending on how much work needs to be done, the cost could be substantial especially for airport hydrant systems that have not been regulated under the UST program until now.

B. Impacts on Massachusetts Municipalities

Executive Order 145 requires MassDEP to assess the fiscal impact of amended regulations on the Commonwealth's municipalities. If a city or town owns USTs that are not otherwise exempt from regulation, it will have to comply with the proposed changes to 310 CMR 80.00. There are approximately 260 UST facilities registered with MassDEP that are owned by a city or town. MassDEP notes that ownership and operation of a UST system, which municipalities may voluntarily undertake, is not a mandated municipal service. Therefore, costs associated with UST system operation are not mandated costs subject to the restrictions of Proposition 2 ½[1].

C. Massachusetts Environmental Policy Act (MEPA)

Pursuant to the Massachusetts Environmental Policy Act Regulations at 301 CMR 11.03(12), these proposed regulations will not reduce standards for environmental protection, opportunities for public participation in permitting or other review processes, or public access to information generated or provided in accordance with these regulations. Therefore, promulgation of these regulations does not require the filing of an Environmental Notification Form under MEPA.

V. PUBLIC HEARING AND COMMENT

MassDEP will hold public hearings and a public comment period on the proposed regulations in accordance with M.G.L c. 30A. The public hearing notice and proposed amendments are available on MassDEP's website at: http://www.mass.gov/eea/agencies/massdep/news/comment/. For further information, please contact Thomas DeNormandie at 617-292-5763 or Thomas.DeNormandie@mass.gov.

[1] Town of Norfolk v. Department of Environmental Quality Engineering, 407 Mass 233 (1990)