TCEQ REGULATORY GUIDANCE
Small Business and Environmental Assistance Division
RG-475b ● Revised March 2011

Installing a New or Replacement Underground Storage Tank

A guide for owners and operators of USTs

This is a general guide to laws and regulations about underground storage tanks and an aid in minimizing potential risks; it does not replace those laws and regulations, which take precedence over any information contained herein. If your tank system is located in Kinney, Uvalde, Medina, Bexar, Comal, Hays, Travis, or Williamson County, additional requirements related to the protection of the Edwards or the Trinity Aquifer may apply (Title 30, Texas Administrative Code [30 TAC], Chapters 213 and 214). Besides the TCEQ, local governments and other state and federal agencies may have rules that apply. The owner and operator are responsible for ensuring compliance with all applicable regulations.

What are the requirements?

A licensed UST installer–on-site supervisor employed by a registered UST Contractor is required for installation of UST systems. Generally, a registered contractor will know the details of how to comply with TCEQ standards; however, compliance is ultimately the owner's responsibility. It is helpful for the owner to know the basic requirements and to become familiar with terminology and options.

Specific standards for equipment and installation procedures may be found in 30 TAC 334 and, in some instances, petroleum-industry references and recommended practices. In those cases, the most recent version of the recommended practice is in effect. For more information on licensing requirements, please refer to module RG-475c, *Licensed Underground Storage Tank Contractors.*

Submit a construction notification form to the TCEQ (form TCEQ-00495) at least 30 days prior to performing work. Between 24 and 72 hours before work on the proposed activity begins, the owner must verbally notify the agency's appropriate regional office. Many times the registered contractor gives notice, but it is ultimately the responsibility of the owner. Coordinate with your contractor to determine who will make the notification.

New tanks and piping must meet specific standards for structural integrity and protection from corrosion. For example, a steel tank must have a fiberglass or polyurethane coating, bond, or jacket that meets specific standards. Additionally, all tank systems must be installed with appropriate spill- and overfill-prevention equipment and be monitored for releases.

New UST systems must be installed to meet requirements for spill, overfill, and release detection, and must have striker plates under all fill and gauge openings.

Tanks may be constructed of coated and cathodically protected steel; steel with an external factory-applied, fiberglass-reinforced plastic; steel with a polyurethane cladding or jacket; or fiberglass-reinforced plastic.

Piping may be constructed of fiberglass-reinforced plastic, coated and cathodically protected steel, or flexible non-metallic material. Flexible connectors must be installed at both ends of a pressurized piping system unless the piping is inherently flexible. For pressurized piping systems, shear or emergency-shutoff valves must be properly installed and anchored. Tanks, piping, and shear valves must be constructed in accordance with applicable standards.

An appropriate number of observation wells 4 inches in diameter or larger must be installed in each tank hole. A tank hole containing only one tank is required to contain at least one observation well; a tank hole containing two or more tanks must contain at least two wells.

The installer must use clean, washed, suitably graded and noncorrosive sand, crushed rock, or pea-gravel backfill that is selected and placed in accordance with the tank and piping manufacturers' specifications.

To prevent flotation of the tanks, an anchoring system is required for all USTs located in areas subject to high water tables or flooding. The anchoring system must meet the tank manufacturer's specifications and applicable TCEQ requirements.

The piping system must slope at least 1/8 inch per foot from the dispenser toward the tank.

Prior to initial use, the tanks and piping must be tested to ensure that there are no leaks in the system.

Registration is required within 30 days of the initial delivery of any regulated substance. Use form TCEQ-00724. Any tank-installation or underground-installation activities must also be certified on that form by the responsible UST installer or on-site supervisor. Factors to consider when installing a UST system include:

- the cost of insurance for the type of system installed
- the geographic location of the tank system
- release-detection options

For UST systems installed after Jan. 1, 2009

Owners and operators must install secondary containment for new and replacement tanks and new piping. Any piping replacement that affects 20 percent or less of the total original length of an existing single-wall line

does not require secondary containment unless the replaced line segment connects the existing line to a new dispenser, in which case the entire line must be secondarily contained. External liners do not meet secondary containment requirements for systems installed after Jan. 1, 2009. Owners and operators must also monitor the interstitial space (the space between the primary and secondary wall) for a release of product.

Owners and operators must install dispenser sumps with any new dispenser.

All sumps and manways used as an integral part of a UST release detection system and all sumps which serve new dispensers installed on or after Jan. 1, 2009, must be:

- compatible with the stored substance;
- installed and maintained in a manner that assures that sides, bottoms, and penetration points are liquid tight;
- tightness-tested at installation and every three years thereafter; and
- equipped with a liquid-sensing probe that will alert the UST system owner or operator if more than 2 inches of liquid collects in any sump or manway.

Owners and operators must properly dispose of any liquid detected by alarms or any liquids or debris found during an inspection within 72 hours of discovery.

For UST systems installed over the Edwards or Trinity Aquifer

If your UST system is being installed over the Edwards or Trinity Aquifer, specific requirements apply that may be found in 30 TAC 213 and 214, respectively.

What records do I need to keep?

You must retain documentation of installations, certifications, notifications, reports, inspections, registration, as-built plans, specifications, revisions, modifications, integrity assessment, components, warranties, instructions, recommendations, schedules, and telephone numbers of contacts and service technicians for the life of the system. Certain other equipment records, including records of air and tightness tests, must be kept for at least five years after installation.

Where can I find more information?

The requirements for new technical and installation standards are at 30 TAC 334.45–46.

You can download forms from the TCEQ's website at <www.tceq.texas.gov/forms>.

You can download publications from the TCEQ's website at <www.tceq.texas.gov/publications>.

For confidential environmental compliance assistance for small businesses and local governments, contact Small Business and Local Government Assistance via the hotline at 800-447-2827 or online at <www.TexasEnviroHelp.org>.

Industry Recommended Practices

Petroleum Equipment Institute Publication RP-100, *Recommended Practices for Installation of Underground Liquid Storage Systems.*
<www.pei.org/>

American Petroleum Institute Publication 1615, *Installation of Underground Petroleum Storage Systems.*
<www.api.org/>