



PST Super Guide

A Comprehensive
Guide to
Compliance
in Texas



TEXAS COMMISSION ON
ENVIRONMENTAL QUALITY

RG-475 (revised 8/19)



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Jon Niermann, *Chairman*
Emily Lindley, *Commissioner*
Bobby Janecka, *Commissioner*

Toby Baker, *Executive Director*

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Buying or Selling Property with Underground Storage Tanks

A guide for owners and operators of USTs

This is module a of the PST Super Guide, a comprehensive guide to issues relating to petroleum storage tanks (PSTs). This super guide provides an overview to laws and regulations for PSTs and it can be used as an aid in minimizing potential risks. The guide does not replace those laws and regulations, which take precedence over any information in this publication.

Module a explains the rules and procedures when property with underground storage tanks (USTs) is bought or sold.

- You, the owner or operator of a PST, are responsible for ensuring compliance with all applicable laws and regulations.
- If your UST system is located in Kinney, Uvalde, Medina, Bexar, Comal, Hays, Travis, or Williamson County, additional requirements related to protecting the Edwards or the Trinity Aquifer may apply (Title 30, Texas Administrative Code [30 TAC], Chapters 213 and 214).
- In addition to the laws and TCEQ rules, local governments, and other state and federal agencies may have rules that apply.

What should I do before I buy a gas station or a property with existing USTs?

Buying a gas station or property with USTs carries considerable responsibilities. You must be prepared to manage significant regulatory and recordkeeping requirements. Before making a purchase, you should evaluate the answers to these important questions:

1. Are the UST systems in compliance with all technical requirements?
2. Is there contamination on the property (either from one or more UST systems or from other sources, including historical or off-site sources) and, if so, do you have the financial resources for clean-up (i.e. assessment, remediation, and monitoring)?
3. If you do not plan to continue dispensing fuel, do you have the available resources to remove the tank(s) from service properly?

Keep in mind that you need as much information as possible from the previous owner to demonstrate technical compliance with applicable TCEQ rules. Installation records and documentation of compliance are invaluable and should be secured if possible. You should obtain estimates of tank removal costs, search for the facility's historical information, and ask the former owner for records of their installation, removal,

upgrades, releases and corrosion protection, and other important documents related to the USTs performance and maintenance.

You should document that any claims made by the seller can be verified with installation, removal, and compliance records. If those records are not available from the seller, you will need to obtain documentation through other sources, such as UST contractors who performed the installation or repair work. This information must be adequate to satisfy the requirements of a TCEQ investigation.

An environmental study called a *Phase I assessment* is commonly conducted prior to the transfer of ownership of commercial property to identify potential environmental contamination from on-site and adjacent properties. Additionally, a *Phase II assessment* is conducted to determine if there is contamination at the site. A *Phase II assessment* includes soil and groundwater samples. Although the *Phase I and II studies* are valuable tools to document existing contamination at the site, they usually do not address historical design, installation, upgrade, and day-to-day operational records.

USTs may have been installed and registered at the property, but have been permanently removed from service after installation. If the tanks have been permanently removed from service, you should request a copy of the Release Determination Report (form TCEQ-00621) or other report documenting the removal of the tank system and any confirmation sampling that may have been conducted.

It is essential for you, as a prospective property owner, to determine whether the TCEQ has issued a “no further action” letter to a previous owner indicating that the site needs no further study. If the previous owner does not have the letter, you can contact the TCEQ Remediation Division to ask for a copy for your records at 512-239-2200.

How can I obtain information about the USTs from the TCEQ?

Use the resources in this list to research and find information about properties with USTs.

- The **TCEQ Central Registry Database** can tell you whether a facility is registered with the TCEQ and provides information submitted by the owner, or a representative of the owner, about the PST system. However, records from the database do not replace information from historical documents, such as original installation records. The database may also indicate whether the facility is, or ever was, registered as a leaking petroleum storage tank (LPST) site. The Central Registry Database is located at <www.tceq.texas.gov/permitting/central_registry>.
- The **Petroleum Storage Tank (PST) Records and Datasets** webpage provides downloadable files, including a statewide listing of LPST sites and PST facility data (including USTs). You can search raw data located at <www.tceq.texas.gov/agency/data/lookup-data/pst-datasets-records.html>.
- The **Compliance History Database** is another source of information. State rules require the TCEQ to maintain and publish compliance histories for many of the companies, individuals, agencies, and other entities that it regulates. Histories become a rating of a customer’s “distance from compliance.” Poor ratings can cause denial of permits, stricter regulation, and higher penalties. It is important to remember that a buyer inherits the compliance history rating of the facility. You

can search the compliance history database at www.tceq.texas.gov/enforcement/history/search.html.

- Check to see if there is a **pending enforcement action** against the current owner of the UST system on the property. To search the status of enforcement actions that are currently open, go to our enforcement actions webpage at www.tceq.texas.gov/enforcement/penenfac/index.html.
- You may also perform an **open records request** online, or via email, fax, or mail to obtain documents, pending applications, ongoing compliance or enforcement actions, or other records. Go to our open records webpage at www.tceq.texas.gov/agency/data/records-services/reqinfo.html for more information.
- For additional **current and historical registration information**, you may contact the PST Registration Team at 512-239-2160.
- For additional information on **cleanup requirements or UST technical requirements**, you may contact the Remediation Division at 512-239-2200.

What should I consider if there is contamination?

The TCEQ does not prevent the sale of LPST sites. All parties involved in the sale of property with an LPST should be aware of the cleanup requirements and potential costs.

Parties may choose to negotiate the terms regarding any required cleanup by establishing a letter of credit or negotiating the price. However, the TCEQ will not be bound by any agreement between the parties, and a buyer of an LPST site is not eligible for the Innocent Owner/Operator Program.

All interested parties may consider hiring a qualified environmental consultant and possibly an attorney to evaluate existing information.

What are my options regarding existing UST systems?

If USTs remain in the ground at the time of the sale of real property, they are generally considered part of the property and are transferred with it, unless the seller specifically maintains ownership of them. The buyer is responsible for keeping (or making) the tanks compliant with applicable rules.

All UST systems must be maintained in compliance with applicable TCEQ rules, whether or not they are in use. If you are going to use a UST system, it must comply with all technical and administrative requirements, including:

- release detection,
- corrosion protection,
- spill and overflow, prevention equipment
- financial assurance,
- registration and self-certification,
- operator training,

- recordkeeping, and
- any other requirements that apply (such as Stage I Vapor Recovery).

Request, from the seller, all existing records associated with the UST system, including:

- installation documentation,
- owner's manuals, and
- compliance documentation.

If the seller cannot provide these records, you may be required to re-create them or perform additional tests and actions to keep the UST system in compliance.

If you are not going to use a UST system, an option for temporarily removing the UST system from service is described in 30 TAC 334.54 and outlined in *Temporarily Removing PSTs from Service* (TCEQ publication RG-475l). Three options for permanently removing the UST system from service (along with additional information) are described in 30 TAC 334.55. Those three options are:

1. removal from the ground,
2. abandonment in place (proper emptying by a licensed UST contractor and filling with sand, cement, etc.), or
3. permanent change in service (storage of non-regulated substances).

Regardless of the option you choose, the work will need to be performed by a TCEQ-licensed UST contractor, and a comprehensive site assessment must be performed to determine whether a release has occurred from any part of the UST systems. For more information on permanent removal from service, see *Permanently Removing Petroleum Storage Tanks from Service* (TCEQ publication RG-475m).

It is a good business practice to secure bids on possible actions that may be necessary to ensure the tank(s)' compliance (removal, upgrades, and/or samples to determine if contamination is present) before taking ownership of the property. There is no substitute for soil and groundwater sampling to determine if there is subsurface contamination.

What Do I Need to Report?

Table 1 summarizes notification and recordkeeping requirements when property with USTs are sold or purchased.

Table 1: Responsibilities of sellers and purchasers of USTs

Responsible Party	Action
Seller	Written disclosure that the tank is regulated by the TCEQ before the property is transferred to the purchaser (30 TAC 334.9)
Purchaser	Update and submit form with tank status and ownership registration within 30 days of sale (Form TCEQ-00724)
Purchaser	Construction notification to TCEQ 30 days prior to major construction activities (Form TCEQ-00495)
Purchaser	Record keeping in accordance with 30 TAC 334.10

Under 30 TAC 334.9, written notification from the seller to the buyer must include the names and addresses of the seller (or grantor) and the purchaser (or grantee), the number of tanks involved, a description of each tank (capacity, tank material, and product stored, if applicable), and the agency's designated facility identification number (if the entire facility is being conveyed). The following certification statement is sufficient:

The underground storage tank (or tanks) included in this conveyance is (are) presumed to be regulated by the Texas Commission on Environmental Quality and may be subject to certain requirements for registration, compliance self-certification, construction notification, and other requirements found in Title 30, Texas Administrative Code, Chapter 334.

For further information regarding tank registration, refer to *Petroleum Storage Tank Registration and Self Certification* (TCEQ publication RG-475d).

Where do I find more information?

Laws and regulations pertaining to the PST program are found in the Texas Water Code, Chapter 26, Subchapter I, available at www.statutes.legis.state.tx.us/Docs/WA/htm/WA.26.htm and in 30 TAC 334 available at [texreg.sos.state.tx.us/public/readtac\\$ext.ViewTAC?tac_view=4&ti=30&pt=1&ch=334](http://texreg.sos.state.tx.us/public/readtac$ext.ViewTAC?tac_view=4&ti=30&pt=1&ch=334).

Links to additional webpages about registering PSTs, technical requirements for regulated PSTs, and LPST cleanup are available at www.tceq.texas.gov/agency/pst_cert.html.

Complete technical standards for USTs are located in 30 TAC 334, Subchapter C available at [texreg.sos.state.tx.us/public/readtac\\$ext.ViewTAC?tac_view=5&ti=30&pt=1&ch=334&sch=C&rl=Y](http://texreg.sos.state.tx.us/public/readtac$ext.ViewTAC?tac_view=5&ti=30&pt=1&ch=334&sch=C&rl=Y).

Requirements for tanks in the Edwards Aquifer are in 30 TAC 213 available at [texreg.sos.state.tx.us/public/readtac\\$ext.ViewTAC?tac_view=4&ti=30&pt=1&ch=213](http://texreg.sos.state.tx.us/public/readtac$ext.ViewTAC?tac_view=4&ti=30&pt=1&ch=213).

Requirements for tanks over other aquifers are in 30 TAC 214 available at [texreg.sos.state.tx.us/public/readtac\\$ext.ViewTAC?tac_view=4&ti=30&pt=1&ch=214&rl=Y](http://texreg.sos.state.tx.us/public/readtac$ext.ViewTAC?tac_view=4&ti=30&pt=1&ch=214&rl=Y).

Guidance for conducting assessment and corrective action at leaking UST sites is available in the Remediation Division's guidance *Investigating and Reporting Releases from Petroleum Storage Tanks* (TCEQ publication RG-411) available at www.tceq.texas.gov/publications/rg/rg-411.html.

Search for TCEQ publications online 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.



Installing a New or Replacement Underground Storage Tank

A guide for owners and operators of USTs

This is module b of the PST Super Guide, a comprehensive guide to issues relating to petroleum storage tanks (PSTs). This super guide provides an overview to laws and regulations for PSTs and can be used as an aid in minimizing potential risks. The guide does not replace those laws and regulations which take precedence over any information in this publication.

Module b explains rules and procedures for installing or replacing an underground storage tank (UST).

- You, the owner or operator of a PST, are responsible for ensuring compliance with all applicable laws and regulations.
- If your UST system is located in Kinney, Uvalde, Medina, Bexar, Comal, Hays, Travis, or Williamson County, additional requirements related to protecting the Edwards or the Trinity Aquifer may apply (Title 30, Texas Administrative Code [30 TAC], Chapters 213 and 214).
- In addition to the laws and TCEQ rules, local governments and other state and federal agencies may have rules that apply.

What are the installation requirements?

Tanks and piping must meet installation standards for new UST systems in 30 TAC 334.46, and technical standards in 30 TAC 334.45.

For all UST system installations, you must have a contractor licensed by TCEQ conduct the installation according to applicable requirements. Additionally, prior to initial use, the installer must physically inspect and test the tanks and piping to ensure that there are no leaks in the system according to 30 TAC 334.46(d). Generally, a registered contractor will know the details of how to comply with TCEQ standards; however, compliance is ultimately your responsibility. It is helpful for you to know the basic requirements and become familiar with terminology and options.

Specific standards for equipment and installation procedures may be found in 30 TAC 334 and, in some instances, in 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-0495) at least 30 days prior to performing work. Between 24 and 72 hours before work on the proposed activity begins, you must verbally notify the agency's appropriate regional office. In many cases the registered contractor gives notice, but it is ultimately your

responsibility. Coordinate with your contractor to determine who will make the notification.

All tank systems must meet the regulations and installation requirements for spill and overflow prevention and control equipment, release detection, and have striker plates under all fill and gauge openings.

New tanks and tank compartments must meet specific standards for structural integrity and protection from corrosion. Tanks may be:

- fiberglass-reinforced plastic;
- steel and equipped with a cathodic protection system;
- constructed as a steel/fiberglass-reinforced plastic composite tank, or as a steel tank with a bonded fiberglass-reinforced plastic external cladding;
- steel with a bonded polyurethane external coating; or
- steel and completely contained within a nonmetallic jacket.

You must also protect all metallic fittings from corrosion either by isolating them from water and backfill material or confirming they are coated in dielectric material or cathodically protected.

All new tank systems must meet the regulations and installation requirements for spill and overflow prevention and control equipment and release detection, and striker plates must be under all fill and gauge openings. Fill pipes must be properly protected from corrosion and have drop tubes within 12 inches from the tank bottom.

Piping may be constructed of fiberglass-reinforced plastic, coated and cathodically protected steel, or made of a 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.

You must register new tanks within 30 days of the initial delivery of any regulated substance using form TCEQ-0724. The responsible UST installer or on-site supervisor must also certify any tank-installation or underground-installation activities on the same form.

For UST systems installed after Jan. 1, 2009

You must install secondary containment for new and replacement tanks and for new piping. Any piping replacement that affects less than 35% 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. You must also monitor the interstitial space for tanks and lines (the space between the primary and secondary wall) for a release of product.

You 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;
- inspected for tightness annually;
- tightness-tested at installation and every three years thereafter; and
- equipped with a liquid-sensing probe that will alert you if more than 2 inches of liquid collects in any sump or manway.

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. Maintain records of all equipment tests conducted on the tanks and piping at the time of installation, including air and tightness tests for at least five years after installation.

Where can I find more information?

The technical and installation standards for new USTs are located in 30 TAC 334.45–46 available at [texreg.sos.state.tx.us/public/readtac\\$ext.ViewTAC?tac_view=5&ti=30&pt=1&ch=334&sch=C&rl=Y](http://texreg.sos.state.tx.us/public/readtac$ext.ViewTAC?tac_view=5&ti=30&pt=1&ch=334&sch=C&rl=Y).

Links to additional webpages about registering PSTs, technical requirements for regulated PSTs, and LPST cleanup are available at www.tceq.texas.gov/permitting/pst_cert.html.

Requirements for tanks in the Edwards Aquifer are in 30 TAC 213 available at [texreg.sos.state.tx.us/public/readtac\\$ext.ViewTAC?tac_view=4&ti=30&pt=1&ch=213](http://texreg.sos.state.tx.us/public/readtac$ext.ViewTAC?tac_view=4&ti=30&pt=1&ch=213).

Requirements for tanks over other aquifers are on 30 TAC 214 available at [texreg.sos.state.tx.us/public/readtac\\$ext.ViewTAC?tac_view=4&ti=30&pt=1&ch=214&rl=Y](http://texreg.sos.state.tx.us/public/readtac$ext.ViewTAC?tac_view=4&ti=30&pt=1&ch=214&rl=Y).

Download TCEQ forms from our website at www.tceq.texas.gov/search_forms.html.

Download TCEQ publications from our website at www.tceq.texas.gov/publications.

Instructions on how to find contractors to install USTs are at www.tceq.texas.gov/remediation/pst_rp/license_ust.html.

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* is available for purchase at www.pei.org/rp100.

American Petroleum Institute Publication 1615, *Installation of Underground Petroleum Storage Systems* is available for purchase at www.techstreet.com/api/standards/api-rp-1615?product_id=1780646.



Licensed Underground Storage Tank Contractors

Selecting the proper contractor to work on your UST system

A guide for owners and operators of USTs

This is module c of the PST Super Guide, a comprehensive guide to issues relating to petroleum storage tanks (PSTs). This super guide provides an overview to laws and regulations for PSTs and it can be used as an aid in minimizing potential risks. The guide does not replace those laws and regulations which take precedence over any information in this publication.

Module c explains how to select an appropriate contractor to work on your underground storage tanks (USTs).

- You, the owner or operator of a PST, are responsible for ensuring compliance with all applicable laws and regulations.
- If your UST system is located in Kinney, Uvalde, Medina, Bexar, Comal, Hays, Travis, or Williamson County, additional requirements related to protecting the Edwards or the Trinity Aquifer may apply (Title 30, Texas Administrative Code [30 TAC], Chapters 213 and 214).
- In addition to the laws and TCEQ rules, local governments and other state and federal agencies may have rules that apply.

Who Should I Hire?

The TCEQ regulates occupational licenses and registrations with regard to USTs. It is important that you contract with the appropriate company or person to perform any necessary work. See 30 TAC 30 (Occupational Licenses and Registrations), Subchapters E (Leaking Petroleum Storage Tank Corrective Action Project Managers and Specialists) and I (Underground Storage Tank On-Site Supervisor Licensing and Contractor Registration). For instructions on how to find licensed UST contractors, go to www.tceq.texas.gov/remediation/pst_rp/license_ust.html.

TCEQ issues occupational licenses and regulates UST contractors and on-site supervisors but does not endorse specific contractors. Conducting due diligence before hiring a contractor can help confirm that the contractor is reputable and qualified. Be sure to verify that they have a valid license and ask them for proof of liability insurance. To find licensed contractors in your area, verify that a license has not expired, or obtain guidance on how to search for one, go to https://www.tceq.texas.gov/remediation/pst_rp/license_ust.html.

After verifying that a contractor's license is valid, you may also consider requesting references about experience or sites where they worked.

Why do I need a Licensed Contractor?

Licensing and registration requirements exist because working on a UST system requires detailed technical knowledge. Be sure to check the expiration date on the contractor's license and ask for proof of liability insurance before allowing work to begin on your UST system. This guide should help you to determine when to use a licensed person to perform work on your UST system. Additionally, Table 1 summarizes which licensees can perform various tasks related to a UST system.

Definitions

Underground storage tank contractor. A person (business or individual) who installs, repairs, or removes a UST (or offers to, or self-represents as able to do so) and meets registration requirements.

On-site supervisor. An individual who supervises the installation, repair, or removal of a UST and who meets licensing requirements. There are three levels of licensing, each with its own responsibilities.

Critical juncture. A UST installation, repair, or removal activity that includes any of the following steps:

- preparing the tank bedding immediately before receiving a tank;
- setting a tank and its piping, including placement of anchoring devices, backfilling to the level of the tank, and strapping;
- connecting piping systems to a tank;
- pressure testing a UST and its associated piping during installation;
- completing backfill and filling the excavation;
- any repair involving connection (or reconnection) of a piping system to a tank;
- any time during repair when the tank or its associated piping is tested; or
- any time during the removal of the UST.

Corrosion specialist. An individual who has knowledge of the physical sciences and the principles of engineering and mathematics acquired by a professional degree and related experience, and is either:

- certified as a corrosion specialist or a cathodic protection specialist by the National Association of Corrosion Engineers (NACE) International; or
- licensed as a professional engineer in Texas in a branch of engineering that includes education and experience in corrosion control of metal tanks and piping.

Corrosion technician. A person who is qualified by training and experience and who is certified as a corrosion technician, corrosion technologist, or senior corrosion technologist by NACE International; employed under the direct supervision of a corrosion specialist; or certified as a cathodic protection tester by NACE International or by the Steel Tank Institute.

Corrective action. Any assessment, monitoring, and remedial activities undertaken to investigate the extent of, and to remediate, contamination.

LPST Corrective Action Specialist (CAS). A person who has at least two years of experience and is registered with TCEQ to perform regulated corrective actions at leaking petroleum storage tank (LPST) sites.

LPST Corrective Action Project Manager (CAPM). A person who is licensed with the TCEQ to perform or supervise regulated corrective actions at LPST sites.

Contractors for Leaking Petroleum Storage Tanks

Once you confirm a UST leak at your facility, you must hire a registered LPST contractor to perform regulated corrective actions on the USTs. A corrective action specialist must be registered with TCEQ in order to perform corrective actions at an LPST site, and must maintain at least \$1 million of liability insurance. To oversee the work done by a CAS, a CAPM is required to be on the LPST site while work is conducted. For more information on release reporting and locating a CAPM and/or CAS, reference *Suspected and Confirmed Releases from Petroleum Storage Tanks* (TCEQ publication RG-475h).

For instructions on how to find contractors to clean up LPSTs, go to www.tceq.texas.gov/remediation/pst_rp/license.html. Also see Table 1, which summarizes which licensees can perform various tasks related to a UST system.

Table 1. UST license levels and the work each license holder can perform.

UST Contractor License	On-Site Supervisor Class A	On-Site Supervisor Class B	On-Site Supervisor Class A/B Combination	Corrosion Specialist	Corrosion Technician
UST Installation	X		X		
Repair (upgrades and replacements)	X		X		
Removal		X	X		
Design of corrosion protection system				X	
Corrosion testing				X	X
Pressure testing (during installation and repair)	X		X		
Secondary containment	X		X		
Installation or replacement of vent lines	X		X		
Installation or replacement of submersible pumps	X		X		

UST Contractor License	On-Site Supervisor Class A	On-Site Supervisor Class B	On-Site Supervisor Class A/B Combination	Corrosion Specialist	Corrosion Technician
Installation of equipment to test tightness of tank or piping	X		X		
Installation of permanent release detection and monitoring equipment	X		X		
Addition or replacement of spill or overflow equipment	X		X		
Installation of stage I equipment	X		X		
<p>A registered UST contractor is required to maintain \$1 million liability insurance.</p> <p>A UST contractor must have a supervisor on-site at all times during critical junctures of installation, repair, or removal, as defined in 30 TAC 30.307.</p> <p>A UST contractor must prominently display his or her registration number on all bids, proposals, offers, and installation drawings.</p>					

Exemptions from Licensing

The following activities do not require a license:

- the initial abatement of a release or emergency actions to stop leaks or ruptures;
- an individual who assists with the installation, repair, or removal of a UST system under the direct, on-site supervision of a licensed on-site supervisor;
- work on a system that is not regulated, exempt, completely excluded, or partially excluded under 30 TAC 334;
- changing dispenser filters; or
- replacing nozzles, hoses, or breakaways.

Where do I find more information?

Requirements for occupational licenses and registrations for LPST corrective action project managers and specialists are located in 30 TAC 30, Subchapter E available at [texreg.sos.state.tx.us/public/readtac\\$ext.ViewTAC?tac_view=5&ti=30&pt=1&ch=30&sch=E&rl=Y](http://texreg.sos.state.tx.us/public/readtac$ext.ViewTAC?tac_view=5&ti=30&pt=1&ch=30&sch=E&rl=Y).

UST on-site supervisor licensing and contractor registration requirements are located in 30 TAC 30, Subchapter I available at [texreg.sos.state.tx.us/public/readtac\\$ext.ViewTAC?tac_view=5&ti=30&pt=1&ch=30&sch=I&rl=Y](http://texreg.sos.state.tx.us/public/readtac$ext.ViewTAC?tac_view=5&ti=30&pt=1&ch=30&sch=I&rl=Y).

Links to additional webpages about registering PSTs, technical requirements for regulated PSTs, and LPST cleanup are available at www.tceq.texas.gov/permitting/pst_cert.html.

Requirements for UST systems in the Edwards Aquifer are in 30 TAC 213 available at [texreg.sos.state.tx.us/public/readtac\\$ext.ViewTAC?tac_view=4&ti=30&pt=1&ch=213](http://texreg.sos.state.tx.us/public/readtac$ext.ViewTAC?tac_view=4&ti=30&pt=1&ch=213).

Requirements for UST systems over other aquifers are in 30 TAC 214 available at [texreg.sos.state.tx.us/public/readtac\\$ext.ViewTAC?tac_view=4&ti=30&pt=1&ch=214&r1=Y](http://texreg.sos.state.tx.us/public/readtac$ext.ViewTAC?tac_view=4&ti=30&pt=1&ch=214&r1=Y).

Instructions for how to find licensed UST contractors are available at www.tceq.texas.gov/remediation/pst_rp/license_ust.html.

Sample field citation at www.tceq.texas.gov/assets/public/compliance/field_ops/citation/20270pst-web-version.pdf.

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



Petroleum Storage Tank Registration and Self-Certification

A guide for owners and operators of USTs

This is module d of the PST Super Guide, a comprehensive guide to issues relating to petroleum storage tanks (PSTs). This super guide provides an overview to laws and regulations for PSTs and can be used as an aid in minimizing potential risks. The guide does not replace those laws and regulations which take precedence over any information in this publication.

Module d explains the rules and procedures for registering and self-certifying underground storage tanks.

- You, the owner or operator of a PST, are responsible for ensuring compliance with all applicable laws and regulations.
- If your UST system is located in Kinney, Uvalde, Medina, Bexar, Comal, Hays, Travis, or Williamson County, additional requirements related to protecting the Edwards or the Trinity Aquifer may apply (Title 30, Texas Administrative Code [30 TAC], Chapters 213 and 214).
- In addition to the laws and TCEQ rules, local governments and other state and federal agencies may have rules that apply.

When is a UST subject to regulation?

A UST is regulated under 30 TAC 334 if it contains a regulated substance and 10 percent or more of its volume lies below the surface of the ground. Regulated substances include hazardous substances and petroleum substances such as gasoline, diesel, motor oil, waste oil, kerosene, jet fuel, and aviation gasoline and other petroleum derivatives. For further clarification on whether your UST is subject to state regulation, please contact the Petroleum Storage Tank Registration Team at 512-239-2160.

How do I register and self-certify my tanks?

Registration is how you inform the TCEQ about your UST system at a facility. Self-certification is an additional step for motor-fuel UST systems to notify the TCEQ that the **motor-fuel** UST system complies with certain technical and administrative requirements. Self-certification is necessary for the owner or operator to obtain a fuel-delivery certificate. Both registration and self-certification are accomplished using the UST Registration and Self-Certification Form (TCEQ-00724), available online at www.tceq.texas.gov/search_forms.html.

Self-certification is required annually for USTs containing motor fuel. Motor fuels include motor gasoline, aviation gasoline, Number 1 or Number 2 diesel fuel, or any blend containing one or more of these substances (for example, motor gasoline blended with alcohol). The owner or operator must certify that the UST system is in compliance with technical standards and requirements for registration and financial assurance. The owner or operator must also certify that all UST facility fees (assessed prior to September 1, 2007 and remaining due to TCEQ) have been paid in full (i.e., annual fees plus all late fees, penalties, & interest). You must submit a current certificate of insurance (or other proof of financial assurance) at the time of self-certification. Every third year, you must also submit a copy of the current operator-training certificate with the annual self-certification. For additional information on operator training, please see *Training for Underground Storage Tank Operators: A guide for owners and operators of USTs* (TCEQ publication RG-475o). Once the form is processed, the TCEQ will issue your certificate authorizing delivery of fuel.

An important part of self-certification involves identifying each tank. Once a tank has been listed on form TCEQ-00724, a permanent label must be affixed on or near the tank, creating a physical match of the tank in the ground with the one listed on the self-certification form. It is not necessary to indicate the fuel grade on the permanent label, but the tank number (and compartment letter, if applicable) must be visible.

A **UST Delivery Certificate** or temporary delivery authorization must be made available to a common carrier before delivery of a regulated substance. Receiving fuel without a current, valid fuel-delivery certificate is a violation of TCEQ rules and may result in fines and penalties. The delivery certificate should be posted at your facility in a location that is visible at all times.

Registration is required for all regulated USTs that contain or have contained a regulated substance, unless otherwise exempted or excluded (30 TAC 334.3-4). Common exemptions include farm or residential tanks with a capacity of 1,100 gallons or less, tanks that contain heating oil, flow-through-process tanks, and septic tanks.

When do I need to submit form TCEQ-00724?

You must submit this form annually, or when a UST is installed or removed, temporarily or permanently, from service. Owners and operators must also use this form to submit to the TCEQ any changes in ownership, address, phone number, release-detection method, or other required information (including changes in financial assurance or technical data). You will also submit form TCEQ-00724 when updating the type of stored regulated substance in your tank(s), which includes switching to a regulated substance containing greater than 10% ethanol, or greater than 20% biodiesel. The form must be submitted within 30 days of any such change.

Each year, owners and operators of USTs with motor fuels must renew their facility's fuel-delivery certificate to maintain authorization to receive fuel. About 45 days before the annual renewal is due, TCEQ mails a reminder to the address on record. However, it is the responsibility of the owner or operator to submit a complete self-certification form by the deadline established in the rule (see Table 1). An incomplete or inaccurate self-certification form will be returned to the applicant for completion or correction before the TCEQ will issue a new fuel-delivery certificate.

When a UST system changes owners or operators, an existing fuel-delivery certificate is only valid for the following 30 days. It is essential that the new owner or operator submit a new self-certification form and proof of financial assurance as soon as possible to ensure that the certificate remains valid.

When will my fuel-delivery certificate expire?

Look at the last digit of the official TCEQ identification number for the registered owner of the UST facility. Table 1 shows when the certificate will expire.

Table 1. Expiration dates for fuel-delivery certificates.

If the owner number ends in	Certificate expires	Renewal date	You must post your new delivery certificate on
1	Jan 31	Jan 2	Feb 1
2	last day of Feb	Jan 30 (in leap year, Jan 31)	Mar 1
3	Mar 31	Mar 2	Apr 1
4	Apr 30	Apr 1	May 1
5	May 31	May 2	Jun 1
6	Jun 30	Jun 1	Jul 1
7	Jul 31	Jul 2	Aug 1
8	Aug 31	Aug 2	Sep 1
9	Sep 30	Sep 1	Oct 1
0	Oct 31	Oct 2	Nov 1

Which parts of the form must be completed for an initial registration?

When initially registering your UST system, please complete the entire form so we can track the information in our database. Completion of Section 13 ensures accurate reporting of technical compliance.

What parts of the form do I fill out for first-time self-certification?

When submitting the form for self-certification for the first time, you must complete sections 1, 2, 3, 4, 6, 7, 8, 9, 11, and 12.

Which parts of the form must be completed for subsequent annual self-certification?

When submitting the form for subsequent annual self-certification, you must complete sections 1 through 9 and any other section of the form where information has changed. If there is a change of ownership with the renewal of your delivery certificate, then you must complete sections 1 through 10 and 12. The TCEQ will return incomplete forms.

What records do I need to keep?

Make a copy of your registration and self-certification form before you submit it to TCEQ. Keep all installation records for your tank and piping system for the life of the system, and all records that document compliance with applicable rules for at least five years (such as periodic testing records, tank-monitoring reports, proof of financial assurance, etc.).

Do I need financial assurance?

Owners or operators of a UST must demonstrate financial assurance for corrective action and third-party pollution liability (environmental-cleanup coverage), except for owners and operators of any UST system exempted under 30 TAC 334.3 or excluded under 30 TAC 334.4, or a state or federal authority described in 30 TAC 37.801(b) (Applicability). Financial-assurance requirements for USTs can be found in 30 TAC 37, Subchapter I. For additional information on financial assurance, please see *Financial Assurance for Petroleum Storage Tanks* (TCEQ publication RG-475i).

Where do I find more information?

The complete requirements for registration and self-certification appear in 30 TAC 334.7 and 334.8:

<[https://texreg.sos.state.tx.us/public/readtac\\$ext.ViewTAC?tac_view=5&ti=30&pt=1&ch=334&sch=A&rl=Y](https://texreg.sos.state.tx.us/public/readtac$ext.ViewTAC?tac_view=5&ti=30&pt=1&ch=334&sch=A&rl=Y)>.

For questions concerning completion of the form or about the information reported on the form, please contact the **Petroleum Storage Tank Registration and Self-Certification Team** at 512-239-2160.

Download the UST Registration and Self-Certification Form:

<www.tceq.texas.gov/assets/public/permitting/rrr/forms/0724.pdf>.

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>



Petroleum Storage Tank Spill and Overfill Prevention and Control

A guide for owners and operators of USTs

This is a general guide to laws and regulations for underground storage tanks and an aid in minimizing potential risks; it does not replace those laws and regulations, which take precedence over any information in this publication. If your UST 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). In addition to the laws and TCEQ rules, 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 laws and regulations.

How can releases from USTs be prevented?

The TCEQ has adopted technical regulations requiring owners and operators of UST systems to prevent spills and other releases, overfills, and corrosion. Spills and overfills result mainly from bad filling practices. In addition, unprotected steel tanks and piping can corrode and release product through holes caused by corrosion of the metal tank or piping. See module RG-475f, *Protecting Petroleum Storage Tanks Against Corrosion*, for additional information. Regulations pertaining to spill and overfill prevention and control located in 30 TAC 334.51 list the required equipment and define proper fill procedures, maintenance, and record keeping.

What is spill and overfill prevention and control? What is its purpose?

Spill and overfill prevention and control relies on equipment designed to prevent releases to the environment during filling of a UST. The purpose of spill and overfill prevention is to prevent the need for cleanup of contamination that may occur when the UST is filled. Overfills and repetitive spills can result in significant cleanup costs and lost product from your UST system.

What are my requirements?

Three pieces of equipment are necessary to meet requirements for spill and overfill prevention: a tight-fill fitting, a spill container, and an overfill prevention device.

- **Tight-fill fitting:** The fill pipe of the tank must be equipped with a tight-fill fitting, adapter, or similar device to ensure a liquid-tight seal during the transfer of product into the tank. Such a fitting between the delivery hose and the UST's fill port reduces the likelihood of a leak.

- **Spill container equipment:** The fill tube must either be fitted with a spill bucket or enclosed in a liquid-tight manway, riser, or sump. The spill bucket must be designed to minimize entry of surface water, groundwater, or any other substance. Facilities with vapor-recovery equipment may have a vapor-tight drain valve. Spill-containing equipment catches any product from the delivery hose and is located at ground level, surrounding the tight-fill fitting. Spill buckets should be kept clear of debris and liquid at all times.
- **Overfill prevention device:** Each tank is required to have a valve or other device that will prevent overfilling of the tank. There are three basic options:
 - automatic shutoff,
 - automatic flow restrictor (may not be used as overfill prevention if installed or replaced after September 1, 2018), or
 - audible alarm with flow restrictor or automatic shutoff.

What are spill buckets?

A spill bucket, also known as a *spill-containment manhole* or a *catchment basin*, is a bucket sealed around the fill pipe (see Figure 1). Try to keep water, sediment, and spilled product out of spill buckets, and pump out the spill bucket to dispose of any debris, liquid, or sediment properly. If the liquid contains fuel or chemicals, it could be considered a hazardous waste and should be disposed of properly. If sumps are required to be liquid tight, then water must be removed. If the spill buckets are not liquid tight, you may need to remove water to meet corrosion protection requirements (see RG-475f for more information).



Figure 1. Spill bucket.

Manufacturers equip spill buckets with either pumps or drains to remove liquid. See Figure 2.

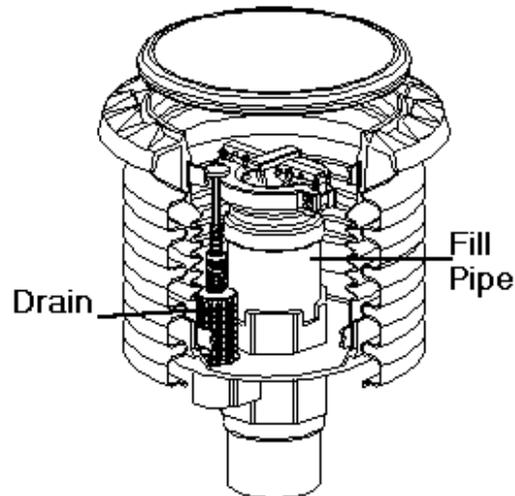


Figure 2. Spill bucket with a drain valve.

What is an automatic shutoff?

An **automatic shutoff** stops flow of product into the tank at a preset level (never more than 95 percent of the tank volume). The most common shutoff devices have a flapper or float (Figure 3) which rises as the tank is filled. Then, when the liquid reaches the preset level, the flapper or float shuts off the flow (Figure 4). The shutoff is most commonly installed in the drop tube.

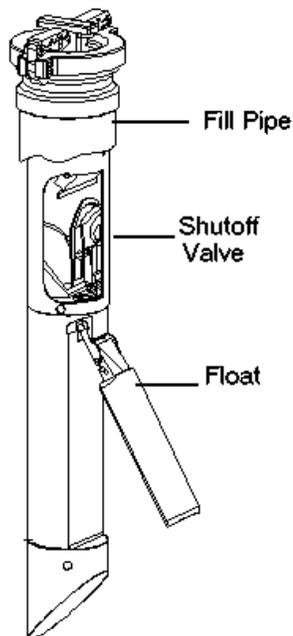


Figure 3. Automatic shutoff device with the float down and the fill valve open.

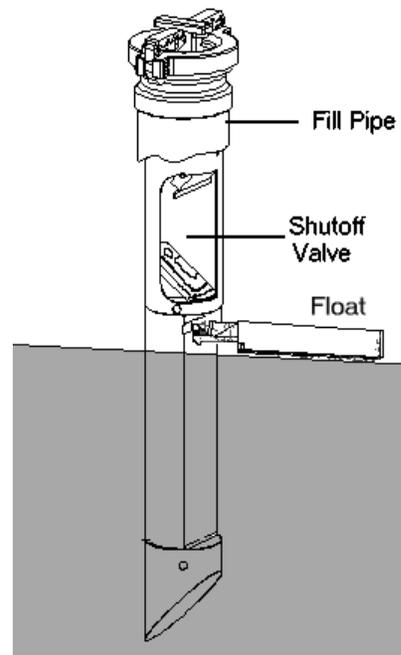


Figure 4. Automatic shutoff device with the float up and the fill valve closed.

What is an automatic flow restrictor?

An **automatic flow restrictor** must restrict flow to the tank above a preset level which never exceeds 90 percent of the volume of the tank. A ball-float valve (Figures 5 and 6), the most common flow restrictor, is usually installed in the vent line or in a separate, dedicated portal, such as an ATG probe riser or Stage I vapor recovery riser. Automatic flow restrictors are no longer allowed to be used as overfill prevention when installed or replaced after September 1, 2018.

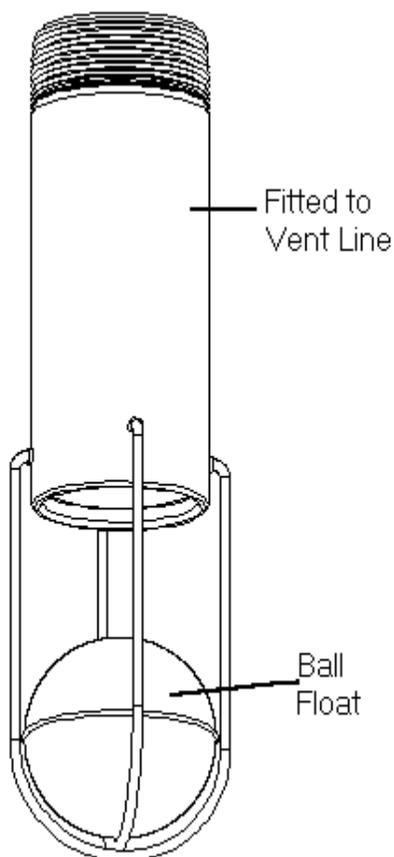


Figure 5. The ball float valve with the ball at the bottom of the cage and the vent line open. The product is below the cage.

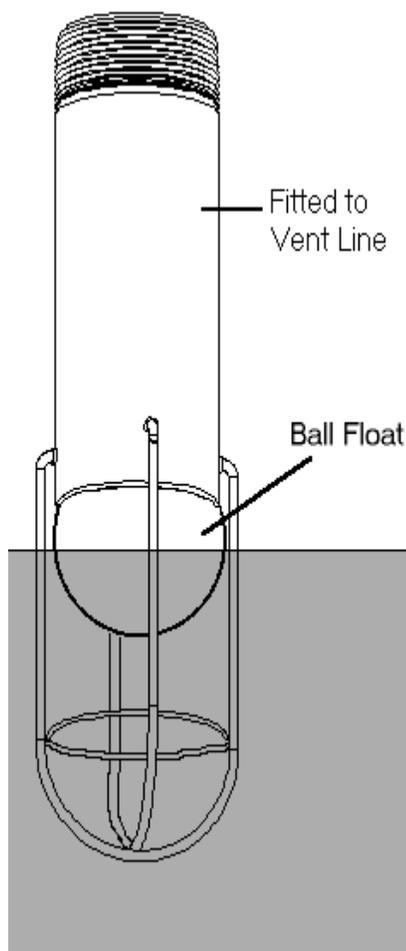


Figure 6. The ball float valve rises as the product rises. The ball eventually seats in the vent line and restricts vapor flowing out of the vent before the tank is full.

Can I use an audible alarm as an overfill device?

An **audible alarm** (Figure 7) that is emitted when the level reaches 90 percent of the tank's volume may be used as an overfill device if used in conjunction with either a flow restrictor or shutoff set at 98 percent of the tank volume.

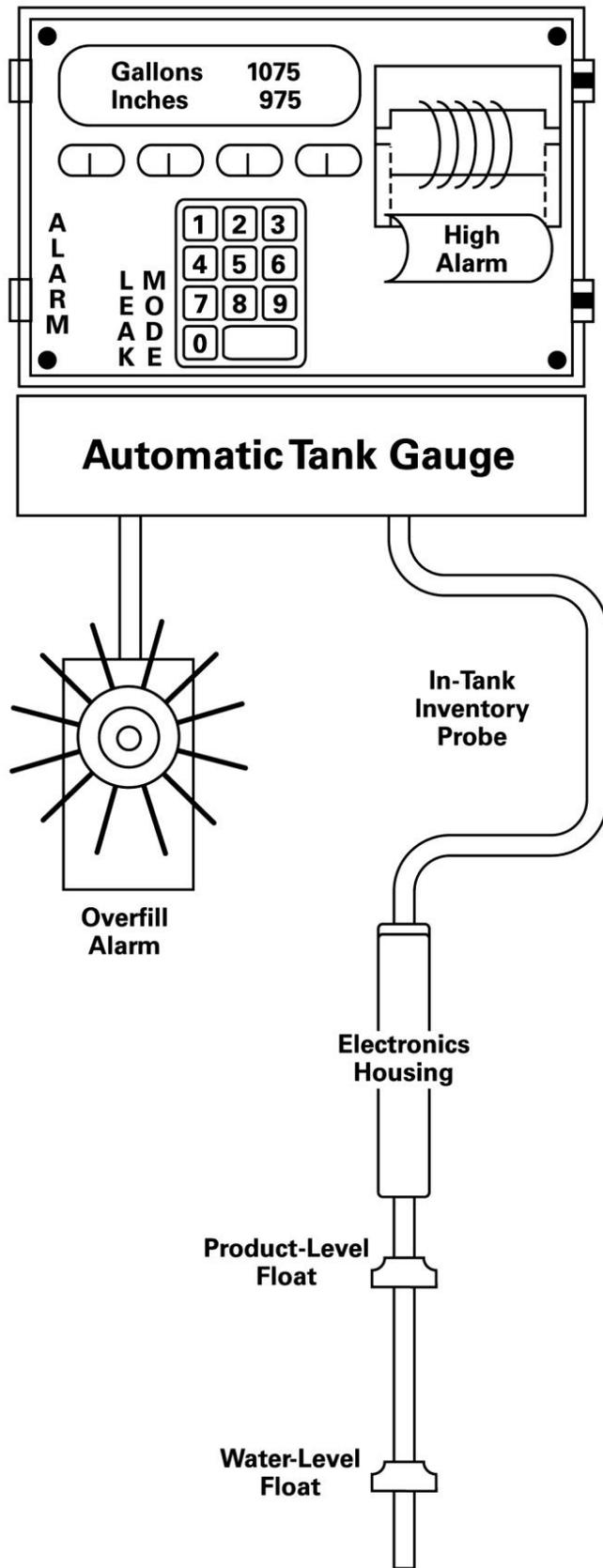


Figure 7. Overfill alarm.

How often do I need to inspect spill prevention equipment?

All spill containers need to be regularly inspected to ensure they are free of debris and liquid and do not have any damage. Currently, facilities are required to conduct this inspection at least once every 60 days.

Beginning January 1, 2021, all facilities are required to conduct 30-day walkthrough inspections of their spill prevention equipment. The owner or operator should make sure that the spill container's sides and bottoms and any penetration points are liquid tight. Remove any liquids or debris found during the inspection within 96 hours of discovery and properly dispose of it. To document compliance with this requirement, keep a logbook with the date of inspection, the result, and name of the person performing the inspection. A sample inspection form is included with this document.

During a 30-day walkthrough inspection:

- Remove any liquid and debris within 96 hours and properly dispose of it.
- Make sure the fill pipe does not have any obstructions and that the cap fits securely.
- If there is double-walled spill prevention, check for leaks in the interstitial area.

What other inspections are required?

In addition to conducting 30-day walkthrough inspections of spill prevention equipment, you must also conduct annual walkthrough inspections of your other containment sumps.

While conducting the annual walkthrough inspection:

- Check all the containment sumps for damage, leaks, or evidence of potential releases.
- For USTs built after January 1, 2009, and any containment sump used for interstitial monitoring, if the sumps have secondary containment, ensure that they are liquid tight and check for leaks in the interstitial area.
- For USTs built before January 1, 2009, and not used for interstitial monitoring of piping, if the sumps are single-walled, check for functioning cathodic protection if the metal components in the sump are in contact with water. Remove any liquid and debris within 96 hours and properly dispose of it.

If you receive product deliveries at frequencies greater than 30 days, then you may conduct your walkthrough inspection prior to each delivery. Make sure to keep records of each delivery and walkthrough inspection.

Exceptions

Certain UST systems are not required to be equipped with the spill and overfill prevention equipment. These exceptions include facilities that do not exceed 25 gallons per transfer, and UST systems that are equipped with alternative equipment that has been reviewed and approved by the agency.

What records do I need to keep?

Generally, you need to keep records to document you're operating your UST system in compliance with applicable rules. No later than January 1, 2021, maintain documentation for the 30-day and annual walkthrough inspections. Keep installation records for the UST system, including documentation of the overfill-prevention device, as long as the equipment is in use.

Where do I find more information?

The complete requirements for spill and overfill prevention may be found at 30 TAC 334.48(h) and 334.51.

See the EPA publication *UST Systems: Inspecting and Maintaining Sumps and Spill Buckets*, EPA 510-R-05-001, available online at <www.epa.gov/ust/ust-systems-inspecting-and-maintaining-sumps-and-spill-buckets-practical-help-and-checklist>.

Search for TCEQ publications online 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>.



30-Day Inspection Log of Spill Prevention Equipment

If you have questions on how to complete this form or about the Petroleum Storage Tank (PST) program, please contact the Small Business and Local Government Assistance hotline at 1-800-447-2827, or online at www.TexasEnviroHelp.org.

Facility Information

Facility Name:	Facility ID No.:
Street Address:	City, State, Zip:
Inspected By:	Date/Time of Inspection:

Instructions

- This form may be used to document spill prevention equipment walkthrough inspections performed every 30 days. Owners and operators must begin conducting these inspections no later than January 1, 2021.
- **If applicable**, check interstitial areas of spill prevention equipment.
- If your UST system is receiving deliveries at intervals greater than every 30 days, you may check spill prevention equipment prior to each delivery.

Spill Buckets MM/DD/YY	Bucket No. (Circle one)	Fixed?	Date Fixed	Bucket No. (Circle one)	Fixed?	Date Fixed	Bucket No. (Circle one)	Fixed?	Date Fixed	Bucket No. (Circle one)	Fixed?	Date Fixed
Is the spill bucket free of any liquid and/or debris?	Yes/No			Yes/No			Yes/No			Yes/No		
Is the spill bucket free of cracks or holes?	Yes/No			Yes/No			Yes/No			Yes/No		
Is the fill cap secured tightly on the fill pipe?	Yes/No			Yes/No			Yes/No			Yes/No		
If debris and/or liquid is present, was it removed within 96 hrs.?	Yes/No			Yes/No			Yes/No			Yes/No		
Is the fill pipe free from obstructions?	Yes/No			Yes/No			Yes/No			Yes/No		
Applicable only to: Double-walled spill prevention equipment with interstitial monitoring. Is interstitial area free of leaks?	Yes/No			Yes/No			Yes/No			Yes/No		

Comments: (e.g.: repairs made, corrective actions taken, etc.):



Protecting Underground Storage Tanks Against Corrosion

A guide for owners and operators of USTs

This is module f of the PST Super Guide, a comprehensive guide to issues relating to petroleum storage tanks (PSTs). This super guide provides an overview to laws and regulations for PSTs and can be used as an aid in minimizing potential risks. The guide does not replace those laws and regulations which take precedence over any information in this publication.

Module f explains how to protect your underground storage tanks (USTs) against corrosion.

- You, the owner or operator of a PST, are responsible for ensuring compliance with all applicable laws and regulations.
- If your UST system is located in Kinney, Uvalde, Medina, Bexar, Comal, Hays, Travis, or Williamson County, additional requirements related to protecting the Edwards or the Trinity Aquifer may apply (Title 30, Texas Administrative Code [30 TAC], Chapters 213 and 214).
- In addition to the laws and TCEQ rules, local governments and other state and federal agencies may have rules that apply.

What is corrosion protection and what is its purpose?

Corrosion protection is a method of slowing or preventing metal components of a UST system from rusting or otherwise corroding or oxidizing. Its purpose is to ensure the structural integrity of the UST system so that releases of regulated substances do not occur. All underground metal components of a UST system that contain, store, or convey regulated substances are required to be properly protected from corrosion, regardless of age, date of installation, or operational status. This includes, but is not limited to, tanks, piping, and flexible connectors. Other underground metal components associated with a UST system that must also be protected from corrosion include, but are not limited to, fill pipes, vent lines, submersible pump housings, spill containers, and riser pipes.

What are my options?

Since Dec. 22, 1988, all new USTs are required to meet comprehensive corrosion protection standards.

Acceptable methods of corrosion protection include:

1. **Noncorrodible material.** Use of a material that will not corrode when exposed to soil or water, such as fiberglass for tanks or piping, or both.
2. **Electrical isolation.** Involves the protection of below-ground metal components by putting them in an open area such as a sump, manway, vault, or pit, and preventing contact with water and soil.
3. **Composite or fiberglass-coated tanks.** This method does not apply to piping and other system components. Tanks do not need further corrosion protection if they meet certain standards and are constructed as a
 - steel/fiberglass-reinforced plastic composite tank;
 - steel tank with a bonded fiberglass-reinforced plastic external cladding; or
 - steel with a bonded polyurethane external coating.
4. **Secondary containment.** A manufacturing method of installing a wall or jacket around metal tanks or piping that meets specific standards for corrosion protection and protects the primary wall of the steel tank from the corrosive elements of soil and groundwater. For example, jacketed steel tanks.
5. **Cathodic Protection.** Discussed in detail below, this is an option for protecting a UST system from corrosion.
6. **Dielectric Material.** A suitable dielectric coating or wrapping used to protect underground components from corrosion. If using this method, additional cathodic protection is required for components that routinely contain regulated substances.

What is cathodic protection?

There are two types of cathodic protection systems: galvanic system and impressed current.

- **Galvanic System.** A sacrificial anode is connected to a metal component in a UST system. The anode, usually made of zinc or magnesium, is wired to the metal component and the anode corrodes instead of the tank or piping. This method is usually used on smaller structures, such as flexible connectors or other metallic piping components.
- **Impressed current.** Anodes connected to the system through a rectifier introduce an electrical current that will inhibit the corrosion of metal components. The anode is wired to the tank in the same manner as in the sacrificial system, but the metal component has such a large surface area that it requires greater protection. A rectifier pushes a low-voltage current through the impressed current cathodic system. The rectifier is usually located on the wall of the facility and has a gauge capable of reading the amperage output of the system.

Federal regulations require that the cathodic protection system be designed by a corrosion specialist. In Texas, a corrosion specialist must be a licensed professional engineer, or designated as a corrosion specialist by a nationally recognized trade group, such as the National Association of Corrosion Engineers.

Testing frequency

A corrosion specialist or corrosion technician must test all cathodic protection systems:

- at installation;
- three to six months after installation; and
- every three years thereafter.

You must also conduct an operational inspection for impressed current systems every 60 days. Record the results of your operational inspections to demonstrate that the rectifier is working properly (retain documentation for at least five years). Wildly varied rectifier readings may indicate a problem, and you should contact your corrosion specialist for specific instructions.

What records do I need to keep?

You need to keep records to document that you are operating your UST system in compliance with applicable rules. You should keep all installation documentation relating to corrosion protection, including information from the manufacturer of the tank and piping and about the cathodic protection system for the life of the UST system. Installation records can include:

- the original invoice from the tank manufacturer;
- a document from the original UST contractor who installed the tanks, or the original UST on-site supervisor stating the brand and model of each tank installed; or
- a TCEQ regional office installation inspection report showing the brand and model for each tank installed at the facility.

If your system is protected by a cathodic protection system, you should keep the results from your cathodic protection tests and rectifier readings for an impressed current system for at least five years. A sample blank log, titled *60-Day Record of Impressed Current Cathodic Protection*, is provided at the end of module f.

If you have an FRP, composite, or jacketed steel tank, then you should keep documents to verify tank material, such as original installation records. If installation records are not available, documentation verifying the tank's material from a licensed UST contractor, UST on-site supervisor, or corrosion specialist may also be acceptable.

Whatever method(s) you use, you must document your system's corrosion protection.

How do I verify tank material without installation records?

If you don't have installation records, you can still verify the system's construction material and obtain documentation for your records. To determine if TCEQ has previously-submitted documents on file that will help verify your tank's material, you can make an open records request. Go to www.tceq.texas.gov/agency/data/records-services/reginfo.html for more information and to request records for your facility. Be

aware that TCEQ does not generally receive invoices or other tank installation records; however, in some instances, original installation inspection reports may be available.

If records are not available, you may need a currently licensed UST contractor, on-site supervisor, corrosion technician, or corrosion specialist to properly verify your tank and/or piping's construction material. The following are some methods used to verify construction material:

- **Visual verification.** If your site has a sump or manway that allows you to see part of your system, your tank and/or piping material may be visually verified by a licensed UST contractor or on-site supervisor. To document this, you should obtain:
 - a written statement from the licensed professional verifying tank material; and
 - **for FRP tanks or piping**, photographic evidence clearly showing the tank is of FRP construction; *or*
 - **for clad/composite tanks**, photographic evidence showing a permanent, factory-applied tag or label clearly indicating tank brand and model or a specification from an acceptable industry code of practice.
- **Camera survey.** If the fill tube is accessible, a licensed UST contractor or UST on-site supervisor can conduct an internal camera survey of your tanks to determine if they are FRP. To document this, you should obtain:
 - a written statement from the licensed professional verifying the tank material; and
 - photographic evidence clearly showing the tank is of FRP construction.**Magnet test.** A UST contractor, UST on-site supervisor, or certified corrosion technician can conduct a magnet test to distinguish between steel (or composite) and FRP tanks; this is because the magnetic force is much less for FRP. To document this, you should obtain:
 - a written statement from the licensed professional verifying the tank's construction material;
 - the test results; and
 - a summary of how that conclusion was drawn.
- **Remote structure-to-soil test and/or local tank-to-soil test.** These tests are performed by a corrosion technician or corrosion specialist and involve taking structure-to-soil and/or tank-to-soil potential measurements. The results will help determine your tank's construction material and whether your UST system meets corrosion protection requirements. To document this, you should obtain:
 - a written statement from the licensed professional verifying the tank's construction material;
 - a copy of the test results; and
 - an explanation of the test results.

Where do I find more information?

The complete requirements for corrosion protection may be found in 30 TAC 334.49, available online at

<[texreg.sos.state.tx.us/public/readtac\\$ext.TacPage?sl=R&app=9&p_dir=&p_rloc=&p_tloc=&p_ploc=&pg=1&p_tac=&ti=30&pt=1&ch=334&rl=49](http://texreg.sos.state.tx.us/public/readtac$ext.TacPage?sl=R&app=9&p_dir=&p_rloc=&p_tloc=&p_ploc=&pg=1&p_tac=&ti=30&pt=1&ch=334&rl=49)>.

Requirements for UST systems in the Edwards Aquifer may be found in 30 TAC 213, available online at

<[texreg.sos.state.tx.us/public/readtac\\$ext.ViewTAC?tac_view=4&ti=30&pt=1&ch=213](http://texreg.sos.state.tx.us/public/readtac$ext.ViewTAC?tac_view=4&ti=30&pt=1&ch=213)>.

Requirements for UST systems over other aquifers may be found in 30 TAC 214, available online at

<[texreg.sos.state.tx.us/public/readtac\\$ext.ViewTAC?tac_view=4&ti=30&pt=1&ch=214&rl=Y](http://texreg.sos.state.tx.us/public/readtac$ext.ViewTAC?tac_view=4&ti=30&pt=1&ch=214&rl=Y)>.

The Small Business and Local Government Assistance Program has information designed to assist UST system owners and operators online at

<<http://www.tceq.texas.gov/assistance/industry/pst/>>.

Download TCEQ publications online at <www.tceq.texas.gov/goto/publications>.

The National Association of Corrosion Engineers has a list of corrosion specialists and corrosion technicians at <www.nace.org>. You can search for corrosion specialists in your area by clicking on the link at the right side of the page titled “Find a Certified Professional.”

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>.



60-Day Record of Impressed Current Cathodic Protection

If you have questions on how to complete this form or about the Petroleum Storage Tank (PST) program, please contact Small Business and Local Government Assistance at its hotline, 800-447-2827, or online at <www.sblga.info>.

Facility Information

Facility Name:	Facility ID No.:
Street Address:	City, State, Zip:

Instructions

- This form may be used to document operational checks of the cathodic protection system rectifier at least once every 60 days.
- If your rectifier is so equipped, you should also record the output voltage and current, and the number of hours indicated on the meter.
- Any significant variance should be reported to your corrosion professional so that any necessary repairs or adjustments can be made.
- A corrosion specialist or corrosion technician should test your cathodic protection every three years.
- Keep this form on file for at least five years.

Impressed Current Rectifier Data

Important System Information	Your Data
Rectifier Manufacturer:	
Rated DC Output (<i>record volts and amps</i>):	
Rectifier Model:	
Rectifier Serial Number:	
What is the “as designed” or most recent recommended rectifier output? (<i>record volts and amps</i>):	



Release Detection and Inventory Control for Underground Storage Tanks

A guide for owners and operators of USTs

This is module g of the PST Super Guide, a comprehensive guide to issues relating to petroleum storage tanks (PSTs). This super guide provides an overview to laws and regulations for PSTs and it can be used as an aid in minimizing potential risks. The guide does not replace those laws and regulations, which take precedence over any information in this publication.

Module g explains how to detect releases, account for inventory, and detect water in underground storage tanks (USTs).

- You, the owner or operator of a PST, are responsible for ensuring compliance with all applicable laws and regulations.
- If your UST system is located in Kinney, Uvalde, Medina, Bexar, Comal, Hays, Travis, or Williamson County, additional requirements related to protecting the Edwards or the Trinity Aquifer may apply (Title 30, Texas Administrative Code [30 TAC], Chapters 213 and 214).
- In addition to the laws and TCEQ rules, local governments, and other state and federal agencies may have rules that apply.

What is release detection?

Release detection is a way to determine if your UST system is leaking below ground and is not applicable to dispensers or aboveground equipment. It allows you to ensure that the tanks and piping are not releasing a petroleum substance into the soil or groundwater. All UST systems are required to have an approved release detection method to monitor at a frequency of at least every 30 days. “Leak detection” and “release detection” have the same meaning.

Why is it required?

Release detection is necessary to prevent or minimize releases of regulated substances (gasoline, diesel, used oil, etc.) into the environment. It involves periodic monitoring of your tanks and piping for leaks, which not only can contaminate soil and groundwater, but also incur a cost to you in lost product and remediation expenses in the event of a release. Effective detection allows for a quick response to signs of a release. Early action on your part protects the environment, while also protecting you from the high costs of cleaning up leaks and responding to liability claims. Often, when releases from

UST systems occur, the petroleum substance can affect soil or groundwater over an area much larger than the property on which the tanks are located, affecting other parties, and increasing the cost of cleanup.

Remember that release detection applies to both tanks and product piping. Together, the tanks and piping are referred to as a “UST system.” TCEQ rules apply to the UST system from underground up to the point where piping exits the ground, leading to the dispenser. Leak detection only affects that part of the UST system that is installed below ground, not dispensers or aboveground equipment.

Many methods are available for monitoring your tanks and piping for leaks, and they may be used in multiple combinations to achieve compliance. Some methods cover tanks only, some cover piping only, and some cover both tank and piping. It is important that you look at release detection not just as something required, but also as a tool that will help you make sure a regulated substance is not leaking from your UST system.

What is inventory control?

Regardless of your chosen release detection method, all retail facilities (where fuel products are sold to the public) are required to perform inventory control. Inventory control is an ongoing accounting system similar to balancing a checkbook. It compares what is in the tank to what should be in the tank by reconciling the inputs and outputs of product with the volume remaining in the UST.

Each day the tank is used, record the following information in your inventory control ledger or worksheet:

- records of product deliveries
- amounts dispensed
- measured volume of product remaining in the tank (inventory)

Electronic Inventory Control Worksheets for blended and non-blended systems are available at <www.tceq.texas.gov/assistance/industry/pst> or you can use your own paper ledger.

Determine fuel inventory by measuring the product level in the tank in one of two ways:

1. Use a measuring stick (sticking the tank) and then convert that level into a volume using a calibration chart specific to the tank size.
2. Use an automatic tank gauge capable of measuring the fuel level.

At the end of each 30-day monitoring period, compare the book inventory (what your recordkeeping indicates you *should* have based on amount of product dispensed) against the measured inventory to determine the total overage or shortage of product. Next, compare the overage or shortage to the “leak check” value calculated by a mathematical formula in the worksheet. The leak check value is described as the sum of 1 percent of the total substance flow-through for the month plus 130 gallons. To calculate the “leak check value” on your own ledger, multiply the total gallons of product dispensed by 0.01, then add 130 to that number. Write that answer as the “leak check” value on your ledger. If the overage or shortage exceeds the “leak check” value for two consecutive 30-day periods for the same tank, you must report a suspected release. (See *Suspected and Confirmed Releases from Petroleum Storage*

Tanks, TCEQ publication RG-475h, for more information about reporting suspected releases.)

Check all tanks for water at least once every 30 days. This required 30-day water check is used to quantify the water in the tank. A small amount may be expected, but it is critical to remove water from the tank before it interferes with dispensing operations. In addition, a sudden influx of water into the tank should be reported to the TCEQ as a suspected release.

If your system has tanks that share a common inventory of fuel, those tanks are considered to be “manifolded.” For example, two 1,000-gallon tanks that are connected (via a siphon line) are considered manifolded tanks. For the purpose of inventory control, you should consider all manifolded tanks as a single system.

Blended-fuel systems are those with no separate tank for a midgrade product. For example, a station sells three grades of gasoline, but only has two tanks. Fuel from each tank is blended to create the midgrade fuel. To complete proper inventory control, the blended fuel product must be accounted for in both of the tanks’ inventory-control records. *Doing proper inventory control on manifolded tanks and blended-fuel systems can be very complicated. For assistance, please call the SBLGA hotline at 800-447-2827.*

For more details and sample inventory control forms, see the U.S. Environmental Protection Agency’s publication no. 510-B-93-004, *Doing Inventory Control Right* available at <www.epa.gov/ust/doing-inventory-control-right-underground-storage-tanks>.

Is inventory control an acceptable method of 30-day release detection?

Inventory control is only effective for finding larger leaks and is not considered a stand-alone method of release detection; it must be used in combination with a 30-day method that can detect small leaks.

What are my options for detecting releases from tanks?

Monitor each tank for leaks at least once every 30 days. When properly employed, the following are acceptable methods of 30-day release detection:

- ***Automatic tank gauging (ATG) and inventory control*** use monitors permanently installed in the tank and linked electronically to a nearby control device to report product level and temperature. Often called the “tank monitor,” the control device is usually mounted on a wall inside a building and has a keypad with a message screen and a printing device. During a test period, the gauging system automatically calculates the changes in product volume that can indicate a leaking tank. The test will often fail or give an inconclusive result if the product level in the tank is too low or if product is added to or removed from the tank while the test is being run. Test periods require several hours of quiet time, when nothing is put into or taken from the tank. Users of the ATG system must perform a complete test on each tank at least once every 30 days and keep all leak test results. A failing test result may require that you notify the TCEQ of a suspected release. For more information on reporting suspected releases, refer to the module *Suspected Releases from Petroleum Storage Tanks* (RG-475h).

In addition to the ATG leak test, inventory control for each tank must be maintained as outlined in the previous section. Some ATG systems can perform inventory control and store the results in memory or print a copy.

- **Statistical inventory reconciliation (SIR) and inventory control** uses a computer program to determine whether a tank system is leaking by conducting a statistical analysis of inventory, delivery, and dispensing data collected over time. You send the data to an SIR vendor, who performs an analysis to determine if there is a loss trend in the UST system.

By the 15th calendar day following the last day of the 30-day monitoring period, the SIR vendor supplies a report that indicates whether the UST system is passing or failing.

If the analysis indicates a failure (or an inconclusive result that cannot be immediately corrected), the situation is considered a suspected release and must be reported to the TCEQ within 24 hours from the time the operator receives the results. **Important: even a single SIR failure requires notification and investigation of a suspected release, even if inventory control indicates there is no leak in the tanks.** In Texas, SIR is considered a 30-day monitoring method of release detection that covers tanks and lines.

- **Interstitial monitoring** is used in double-walled UST systems. Monitoring sensor equipment is designed to detect if product vapors or liquid is present in the interstitial space between the inner (primary) and outer (secondary) walls of the system. The sensor must monitor the interstitial space between the walls, and the sensor status must be documented at least once every 30 days. Document the status by printing your liquid sensor report from the manufacturer, if available, or by manually logging the status by hand.
- **Groundwater monitoring** uses monitoring wells that are installed at strategic locations in the ground near the tank system. Groundwater is monitored for the presence of liquid product (gasoline, diesel, used oil) floating on its surface. To discover if leaked product has reached groundwater, these wells are checked periodically (at least once every 30-days) by hand, or continuously with permanently installed equipment (electronic sensors). This method is only valid at sites where groundwater is within 20 feet of the surface year-round and the subsurface soil or backfill material (or both) consists of gravels, coarse to medium sands, or other similarly permeable materials. The person who installs the wells should state in writing that a release from any part of the UST system will be detected within 30-days of its occurrence.
- **Vapor monitoring** is the sensing and measurement of product vapor in the soil around the tank system to determine whether a leak is present. This method requires installation of carefully placed monitoring wells in the ground near the tank system. Vapor monitoring can be periodic (at least once every 30 days) using manual devices or continuous using permanently installed equipment (electronic sensors). All subsurface soils and backfill material must be sufficiently porous (e.g., gravel, sand) to allow vapors to diffuse rapidly through the subsurface. For this method of release detection to be acceptable, any preexisting background contamination in the subsurface soils must not interfere with the ability of the vapor-monitoring equipment to detect a new release. The person who installs the wells should state in writing that a release

from any part of the UST system will be detected within 30 days of its occurrence.

Note: For both groundwater monitoring and vapor monitoring, you are required to ensure subsurface conditions that enable the monitoring systems to detect a release from any portion of the system that contains product.

- **Secondary containment barriers** are impermeable barriers (i.e., liners, vaults) placed between the UST system and the environment. Leaked product from the UST system is directed toward monitoring points, such as observation wells located between the tank system and the secondary containment barrier. To determine if a leak has occurred, the wells should be checked periodically (at least once every 30 days) by hand or continuously with permanently installed equipment (electronic sensors).
- **Manual tank gauging** is only acceptable for tanks with a capacity of 1,000 gallons or less. It requires a quiet period each week where nothing is added to or removed from the tank. The length of the quiet period depends on the diameter of the tank. For that reason, very few owners or operators use this method of release detection. If you would like more information about this method, contact the SBLGA hotline at 800-447-2827.
- **30-day tank gauging** is only acceptable for emergency-generator tanks. It requires a quiet period, during which nothing is added to or removed from the tank. The product level is measured at the beginning and end of the quiet period. The difference between measurements should be within certain standards based on the capacity of your tank. At the end of module g, there is a 30-day tank gauging tracking sheet. If you would like more information on this method, contact the SBLGA hotline at 800-447-2827.

What other inspections are required?

Every 30 days, you must conduct and document a walkthrough inspection to ensure your release detection equipment is functioning correctly with no unusual operating conditions. For example, you must check for:

- Erratic behavior of product dispensing equipment;
- Sudden loss of product from the UST system;
- Unexplained presence of water in the tank; and
- Ensure release detection records are reviewed and current.

You must also annually inspect any hand-held equipment you use to conduct release detection on your system. For example, if you use a measuring stick to gauge your product level or use a groundwater bailer to monitor groundwater for releases, you must verify that the measurements are clear, and that the bailer is functioning properly. Keep records documenting the dates and results of these inspections.

What are my options for detecting releases from product piping?

There are two types of piping: pressurized and suction.

Pressurized Piping

Each pressurized product line (from the USTs to the fuel dispenser) is required to have an automatic line-leak detector (ALLD) designed to detect and prevent a large or catastrophic leak (of at least 3 gallons per hour) in the line. Mechanical ALLDs are required to be performance tested annually. If you have an electronic ALLD (also referred to as an ELLD) that can self-test and either print out or store the test results, documentation of the self-test at least once a year satisfies your ALLD-testing requirements. Contact your UST contractor for more information about ALLD testing.

In addition to an ALLD, pressurized piping requires one of the following release-detection methods:

- an annual piping-tightness test,
- 30-day vapor monitoring,
- 30-day groundwater monitoring,
- 30-day interstitial monitoring,
- 30-day monitoring with a secondary containment barrier,
- 30-day SIR and inventory control, or
- 30-day electronic leak monitoring through an ATG system.

Suction Piping

Suction piping requires no leak detection if it meets all of the following design requirements:

- The below-grade piping operates at less than atmospheric pressure;
- The below-grade piping is sloped so that the contents of the pipe drain back into the tank when suction is released;
- Only one check valve is included for each suction line and it is located directly below, and as close as possible to, the suction pump; and
- You are able to verify that these requirements have been met, e.g., via plans provided by the installer, a consultant, or signed documentation by a registered UST contractor.

Suction piping that does not meet the design requirements listed above must use one of the following approved methods to meet the release-detection requirements for piping:

- a piping-tightness test once every three years,
- 30-day vapor monitoring,
- 30-day groundwater monitoring,
- 30-day interstitial monitoring,
- 30-day monitoring with a secondary containment barrier, or
- 30-day SIR and inventory control.

What release detection records do I need to keep?

All testing and monitoring results, including the results of any annual function test of mechanical ALLDs, must be kept for at least five years.

All equipment used for release detection must have a third-party certification, which verifies that the equipment meets EPA standards. Each certification must list the conditions of use and limitations of the equipment. You must maintain copies of these certifications while the equipment is in use. You must ensure that the equipment is operated in accordance with the third-party certification. *Installation and maintenance records for the UST system must be maintained for the life of the system and should not be discarded after five years.*

The following supplemental record-keeping forms are included at the end of module g:

- 30-day Record of Vapor-Well Monitoring
- 30-day Record of Groundwater-Well Monitoring
- 30-day Record of Interstitial-Sensor Monitoring
- 30-day Record of Secondary Containment Well Monitoring
- Weekly Record of Manual Tank Gauging (Tanks <1,000 gallons)
- Record of 30-day Tank Gauging

What if there is a release?

If any of the release detection methods discussed in module g indicate that a leak has occurred, you are required to report it to TCEQ within 24 hours as a suspected release at 512-239-2200 or 800-832-8224.

For more information on what to do in the case of suspected releases, refer to the module *Suspected Releases from Petroleum Storage Tanks* (RG-475h).

Where do I find more information?

The complete requirements for release detection may be found at 30 TAC 334.50, available online at

[http://texreg.sos.state.tx.us/public/readtac\\$ext.TacPage?sl=R&app=9&p_dir=&p_rloc=&p_tloc=&p_ploc=&pg=1&p_tac=&ti=30&pt=1&ch=334&rl=50](http://texreg.sos.state.tx.us/public/readtac$ext.TacPage?sl=R&app=9&p_dir=&p_rloc=&p_tloc=&p_ploc=&pg=1&p_tac=&ti=30&pt=1&ch=334&rl=50).

Resources for PST facilities are available on our website at

<https://www.tceq.texas.gov/agency/data/lookup-data/pst-datasets-records.html> >.

Requirements for UST systems in the Edwards Aquifer are in 30 TAC 213 available online at

[http://texreg.sos.state.tx.us/public/readtac\\$ext.ViewTAC?tac_view=4&ti=30&pt=1&ch=213](http://texreg.sos.state.tx.us/public/readtac$ext.ViewTAC?tac_view=4&ti=30&pt=1&ch=213).

Requirements for UST systems over other aquifers are in 30 TAC 214 available at

[http://texreg.sos.state.tx.us/public/readtac\\$ext.ViewTAC?tac_view=4&ti=30&pt=1&ch=214&rl=Y](http://texreg.sos.state.tx.us/public/readtac$ext.ViewTAC?tac_view=4&ti=30&pt=1&ch=214&rl=Y).

The Small Business and Local Government Assistance Program has information designed to assist UST system owners and operators online at www.tceq.texas.gov/assistance/industry/pst/.

Download TCEQ publications online at www.tceq.texas.gov/goto/publications.

EPA's Underground Storage Tanks (USTs) webpage (please note that EPA requirements may be used as a guideline but differ from Texas requirements) at www.epa.gov/ust.

EPA's Doing Inventory Control Right (publication no. 510-B-93-004) provides details and sample inventory control forms at www.epa.gov/ust/doing-inventory-control-right-underground-storage-tanks.

Suspected Releases from Petroleum Storage Tanks (TCEQ Publication RG-475h), available online at www.tceq.texas.gov/goto/rg-475.

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

30-Day Record of Vapor-Well Monitoring

If you have questions on how to complete this form or about the Petroleum Storage Tank (PST) program, please contact the Small Business and Local Government Assistance hotline at 1-800-447-2827, or online at <www.TexasEnviroHelp.org>.

Facility Information

Facility Name:	Facility ID No.:
Street Address:	City, State, Zip:

Instructions

- Vapor wells must be monitored at least once every 30 days for potential product releases.
- Monitoring and observation wells must be properly secured to prevent any unauthorized substances being deposited in the well.
- If there is a suspected release, notify the TCEQ within 24 hours and refer to *Suspected and Confirmed Releases from Petroleum Storage Tanks* (TCEQ publication RG-475h).
- Keep this form on file for at least 5 years.

Vapor Reading Instrument & Tank Information

Instrument Name and Type:	
Date Last Calibrated:	Depth from Ground Surface to Tank Bottom (in feet):

Vapor Monitoring Well Record

Date Inspected	Vapor Reading (in PPM)						Free Product in Well (Y/N)	Inspector Initials	Comments
	Well #1	Well #2	Well #3	Well #4	Well #5	Well #6			



30-Day Record of Groundwater-Well Monitoring

If you have questions on how to complete this form or about the Petroleum Storage Tank (PST) program, please contact the Small Business and Local Government Assistance hotline at 1-800-447-2827, or online at. <www.TexasEnviroHelp.org>.

Facility Information

Facility Name:	Facility ID No.:
Street Address:	City, State, Zip:

Instructions

- Groundwater wells must be monitored at least once every 30 days for potential product releases.
- Monitoring wells must be properly secured to prevent any unauthorized substances being deposited in the well.
- Automatic monitoring devices must be capable of detecting at least 1/8 inch of free product on top of the groundwater.
- Manual monitoring methods must be capable of detecting a visible sheen or other accumulation of regulated substances.
- If there is a suspected release, notify the TCEQ within 24 hours and refer to *Suspected Releases from Petroleum Storage Tanks* (TCEQ publication RG-475h).
- Keep this form on file for at least five years.

Groundwater

Depth from Ground Surface (in feet):	Depth to Tank Bottom (in feet):
---	--

Groundwater- Monitoring Well

Date Inspected	Depth to Top of the Groundwater (in feet)						Free Product in Well (Y/N)	Inspector Initials	Comments
	Well #1	Well #2	Well #3	Well #4	Well #5	Well #6			



30-Day Record of Interstitial-Sensor Monitoring

If you have questions on how to complete this form or about the Petroleum Storage Tank (PST) program, please contact the Small Business and Local Government Assistance hotline at 1-800-447-2827, or online at <www.TexasEnviroHelp.org>.

Facility Information

Facility Name:	Facility ID No.:
Street Address:	City, State, Zip:

Instructions

- Interstitial sensors must be monitored at least once every 30 days for potential product releases.
- If there is a suspected release, notify the TCEQ within 24 hours and refer to *Suspected and Confirmed Releases from Petroleum Storage Tanks* (TCEQ publication RG-475h).
- Keep this form on file for at least five years.

Sensor Location (tank or dispenser [T/D])

Sensor #1	Sensor #2	Sensor #3	Sensor #4	Sensor #5	Sensor #6	Sensor #5	Sensor #6	Sensor #7	Sensor #8

Sensor -Status Record

Date Inspected	Sensor Status								Inspector Initials	Comments
	Sensor #1	Sensor #2	Sensor #3	Sensor #4	Sensor #5	Sensor #6	Sensor #7	Sensor #8		



30-Day Record of Secondary Containment Well Monitoring

If you have questions on how to complete this form or about the Petroleum Storage Tank (PST) program, please contact the Small Business and Local Government Assistance hotline at 1-800-447-2827, or online at www.TexasEnviroHelp.org.

Facility Information

Facility Name:	Facility ID No.:
Street Address:	City, State, Zip:

Instructions

- Observation wells must be monitored at least once every 30 days for potential product releases.
- *Note:* if your system uses observation wells or electronic sensors to determine if there is free product in the secondary containment, record any free product detected.
- Observation wells must be properly secured to prevent any unauthorized substances being deposited in the well.
- If there is a suspected release, notify the TCEQ within 24 hours and refer to *Suspected and Confirmed Releases from Petroleum Storage Tanks* (TCEQ publication RG-475h).
- Keep this form on file for at least five years.

Monitoring Method

Secondary-Containment Release-Detection Method (circle one):	
Observation Wells	Electronic Sensors

Observation Well or Sensor-Status Record

Date Inspected	Sensor-Status or Well Observation (Free product detected? (Y/N))						Inspector Initials	Comments
	Sensor/Well #1	Sensor/Well #2	Sensor/Well #3	Sensor/Well #4	Sensor/Well #5	Sensor/Well #6		



Weekly Record of Manual Tank Gauging (Tanks <1,000 gallons)

If you have questions on how to complete this form or about the Petroleum Storage Tank (PST) program, please contact the Small Business and Local Government Assistance hotline at 1-800-447-2827 or online at <www.TexasEnviroHelp.org>.

Facility Information

Facility Name:	Facility ID No.:
Street Address:	City, State, Zip:

Instructions

- Manual Tank Gauging must be performed weekly.
- In the table to the side, circle your tank size, duration, and standard.
- If the weekly total or average of the four weekly test results exceeds the standard in the table, your tank may be leaking.
- If there is a suspected release, notify TCEQ within 24 hours and refer to *Suspected and Confirmed Releases from Petroleum Storage Tanks* (TCEQ publication RG-475h).
- If you don't have sufficient quiet time, you must choose a different method of release detection.
- Release detection is a good business practice. Lost product, penalties and fines, and cleanup costs can add up to a significant amount of money.

Tank Size	Minimum Duration of the Test	Weekly Standard (1 test)	Monthly Standard (4-test average)
Up to 550 Gallons	36 hours	10 gallons	5 gallons
551-1000 gallons (when tank diameter is 64")	44 hours	9 gallons	4 gallons
551-1000 gallons (when tank diameter is 48")	58 hours	12 gallons	6 gallons

Gauge Record

Start Test (date and time)					
First Initial Stick Reading					
Second Initial Stick Reading					
Average Initial Reading					
Initial Gallons (convert inches to gallons) [a]					
End Test (date and time)					To calculate monthly average, divide sum of 4 weekly readings by 4 and enter results here ▼
First End Stick Reading					
Second End Stick Reading					
Average End Reading					
End Gallons (convert inches to gallons) [b]					
Change In Tank Volume (gallons + or -) [a-b]					
Initials					
Tank Passes Test? Y/N					



Record of Release Detection Annual Testing

If you have questions on how to complete this form or about the petroleum storage tank (PST) program, please contact the Small Business and Local Government Assistance Hotline at 1-800-447-2827 or visit our Web site at <www.TexasEnviroHelp.org>.

Facility Information

Facility Name:	Facility ID #:
Street Address:	City, State, ZIP:

Instructions

- Your release detection equipment must be tested annually for proper operation.
- The code of practice that may be used is Petroleum Equipment Institute (PEI) Publication RP1200, "Recommended Practices for the Testing and Verification of Spill, Overfill, Leak Detection and Secondary Containment Equipment at UST Facilities."
- If an item listed in the *Components Tested* column is not applicable to your facility, record "N/A" for that item.
- List any additional release detection equipment in the *Other Components Tested* column.
- Have the Release Detection Tester record the test date in the space above the table, complete the testing, and fill out the table below.
- In the last column, have the Release Detection Tester record the actions taken to fix any issues identified during the test.
- Have the Release Detection Tester sign and date the bottom of this form. Keep the form on file for at least 5 years.

Date(s) of annual release detection operation test: _____

<i>Component Tested</i>	<i>Name of Tester</i>	<i>Meets Criteria? (Y/N)</i>	<i>Needs Action? (Y/N)</i>	<i>Action Taken to Correct Issue</i>
Automatic tank gauge and other controllers: test alarm; verify system configuration; test battery backup.				
Probes and sensors: inspect for residual buildup; ensure floats move freely; ensure shaft is not damaged; ensure cables are free of kinks and breaks; test alarm operability and communication with controller.				
Automatic line leak detector: test to ensure device can detect any release from the piping system of 3 gallons per hour at 10 pounds per square inch within one hour by simulating a leak.				
Vacuum pumps and pressure gauges: ensure proper communication with sensors and controller.				
Hand-held electronic sampling equipment associated with groundwater or vapor monitoring: ensure proper operation.				
<i>Other Components Tested:</i>	<i>Name of Tester</i>	<i>Meets Criteria? (Y/N)</i>	<i>Needs Action? (Y/N)</i>	<i>Action Taken to Correct Issue</i>

Release Detection Tester Signature

Date



Suspected and Confirmed Releases from Petroleum Storage Tanks

A guide for owners and operators of PSTs

This is module h of the PST Super Guide, a comprehensive guide to issues relating to petroleum storage tanks (PSTs). This super guide provides an overview of laws and regulations for PSTs and can be used as an aid in minimizing potential risks. The guide does not replace those laws and regulations, which take precedence over any information in this publication.

Module h explains what factors should make you suspect a release, how to confirm a release, and what actions you should take when a release of a regulated substance is suspected or confirmed.

- You, the owner or operator of a PST, are responsible for ensuring compliance with all applicable laws and regulations.
- If your underground storage tank (UST) system is located in Kinney, Uvalde, Medina, Bexar, Comal, Hays, Travis, or Williamson County, additional requirements related to protecting the Edwards or the Trinity Aquifer may apply (Title 30, Texas Administrative Code [30 TAC], Chapters 213 and 214).
- In addition to the laws and TCEQ rules, local governments and other state and federal agencies may have rules that apply.

What is a suspected release?

You may have a suspected release when there is an indication that a leak, spill, or overflow of fuel or another regulated substance has occurred. A suspected release may be indicated when any of the following conditions occur (see 30 TAC 334.72):

- Monitoring results from a release detection method required under 30 TAC 334.50 indicate that a release may have occurred. Note: You must report a suspected release if Inventory Control (IC) results fail for two consecutive months.
- There is direct visual or olfactory observation of released product in the environment (for example, sheen on surface water, or product vapors in a utility conduit), but the product source is unknown.
- Unusual operating conditions (for example, erratic dispenser behavior, sudden loss of product, or appearance of tank water) indicate that a release may have occurred, unless the system equipment is found to be defective but not leaking.

- The interstitial monitor indicates a breach in the primary wall or secondary barrier.
- Statistical inventory reconciliation (SIR) and IC is the release detection method, and you receive a “fail” from the SIR vendor (this finding must be reported to the TCEQ within 24 hours), or results are “inconclusive” and cannot be quantified as “pass” (this finding must be reported within 72 hours).
- A spill bucket or sump appears to be leaking.

What is a confirmed release?

A confirmed release occurs when environmental contamination is present, and the source of the contamination is known, as demonstrated by any of the following:

- Product is discovered in observation wells or other secondary containment portions of the PST system.
- Any spill or overfill from a UST system that results in a release into groundwater, surface water, or subsurface soils that exceeds 25 gallons or causes a sheen on nearby surface water.
- Any spill or overfill from a PST that is less than 25 gallons and cannot be cleaned up within 24 hours of the spill.
- Analytical results of samples collected during a routine removal of a PST system from service or from a real estate transfer show contamination.
- Environmental contamination is found in the course of investigating a suspected release, or the source of a previously discovered unknown release is identified.

What actions should I take if I suspect a release?

If a leak is suspected, you must do the following to respond to a suspected release and to determine the extent of any environmental damage (see 30 TAC 334.74):

1. If leak-detection equipment or processes indicate a possible release, then they should be evaluated to determine if they are defective and, if so, they should be repaired or corrected.
2. Suspected releases must be reported to the TCEQ within 24 hours. You may use the TCEQ PST Incident Report Form (TCEQ-20097) at www.tceq.texas.gov/assets/public/remediation/rpr/documents/20097.docx. Your completed form may be e-mailed to pstrpr@tceq.texas.gov, faxed to 512-239-2216, or the information from the form may be relayed by phone at 512-239-2200.
3. You must investigate the suspected release by either of the following methods within 30 days:
 - a. Conduct a tightness test to determine if any leaks are present in the tank and associated piping. Please note that a licensed, on-site supervisor is required to perform the tightness test if it is conducted as part of an installation, repair, or removal of a regulated UST.
 - b. Conduct a site check of the associated area. The site check includes sampling and must be conducted in accordance with 30 TAC 334.74(2).

4. You must submit a release determination report (RDR) documenting the results of the suspected release investigation to the agency. If testing indicates that a release has not occurred at the site, include a detailed description of the investigative procedures that you followed. This report must:
 - a. Be submitted within 45 days after the first observation of the suspected release.
 - b. Include the results of all tests or monitoring performed and a statement that you sign certifying that the requirements of the investigative procedure have been met. The RDR Form (TCEQ-00621) is available online at: www.tceq.texas.gov/assets/public/remediation/rpr/documents/00621.pdf
5. If investigation results confirm a release has occurred, you must repair or replace any portions of the system that are found to be leaking and begin further investigation and corrective action.

The reporting schedule for PST releases is summarized in Table 1.

Table 1: PST Release Reporting Schedule—Summary (From RG-411)

Time Frame ¹	Scenario or Description	Required Report or Form ²
Within 24 hours of suspecting a release	Report all suspected releases to the TCEQ (30 TAC 334.72).	PST Program Incident Report form (TCEQ-20097)
Within 30 days of suspecting a release	Conduct system test, site check, or other approved procedure to investigate and confirm suspected release (30 TAC 334.74).	N/A
Within 45 days of suspecting a release	Report investigation of a suspected release where ultimately, no release was found (30 TAC 334.74(3)).	PST Release Determination Report form (TCEQ-00621)
Within 24 hours of release confirmation	Report all confirmed releases to the TCEQ (30 TAC 334.76).	PST Program Incident Report form (TCEQ-20097)
Within 20 days of release confirmation	Report a confirmed release, whether above or below action levels (30 TAC 334.77(b)).	PST Release Determination Report form (TCEQ-00621)
Within 45 days of release confirmation	Conduct site assessment and submit report (30 TAC 334.78(c)).	Assessment Report Form (TCEQ-00562)

¹ Another schedule may be approved or required by the agency.

² Another format may be approved or required by the agency.

What immediate action (initial response) should I take in the event of a confirmed release?

Unless the agency directs otherwise, you must do the following if a release is confirmed (see 30 TAC 334.76):

1. Stop the release and attempt to prevent further movement into the environment. It may be necessary to shut down all or part of the system immediately to avoid further release or other harm.
2. Monitor and mitigate any fire or safety hazards posed by vapors or product. If the release presents a safety or fire hazard (for example, product or vapors are found in drinking-water wells, utility lines, buildings, or storm sewers), contact your local emergency response agencies and TCEQ emergency response personnel immediately to mitigate the situation.
 - To report your confirmed release, contact the Remediation Division at 512-239-2200 or the Emergency Response hotline at 800-255-3924.
3. Isolate and contain surface spills from access to the public until they are cleaned up.
4. Remove leaked product (if present) to the extent practicable.
5. Report the release to the agency within 24 hours using the TCEQ PST Incident Report Form (TCEQ-20097), which is found at www.tceq.texas.gov/assets/public/remediation/rpr/documents/20097.docx. Your completed form may be e-mailed to pstrpr@tceq.texas.gov, faxed to 512-239-2216, or the information from the form may be relayed by phone at 512-239-2200.

Are there additional requirements for confirmed releases?

The following requirements also apply in the event of a confirmed release:

1. **Initial abatement measures and site check** (see 30 TAC 334.77). You must perform the following abatement measures:
 - remove as much of the regulated substance from the tank as is necessary to prevent further release to the environment;
 - visually inspect releases and prevent further migration of the substance into surrounding soils and groundwater;
 - continue to monitor and mitigate any additional fire and safety hazards from vapors that have entered into subsurface structures (such as sewers or basements);
 - remedy hazards posed by contaminated soils that are excavated or exposed as a result of release confirmation, site investigation, abatement, or corrective action activities. If these remedies include treatment or disposal of soils, you must comply with applicable state and local requirements;
 - measure for the presence of a release where contamination is most likely to be present at the site, unless the presence and source of the release have been confirmed as required by 30 TAC 334.74 or the closure site assessment of 30 TAC 334.55(e);
 - investigate to determine the possible presence of Non-Aqueous Phase Liquids (NAPLs) and begin NAPL (i.e. the portion of the product not dissolved in water

or adhering to soil) removal as soon as practicable while meeting requirements in 30 TAC 334.79; and

- within 20 days after release confirmation, you must submit a report summarizing initial abatement steps (RDR Form, TCEQ-00621, may be used).
2. **Site assessment** (see 30 TAC 334.78). You must gather information about the site and the nature, cause, and estimated quantity of the release, including but not limited to, the following information obtained while confirming the release or completing initial abatement measures:
- data describing surrounding populations, water quality, use and approximate locations of wells potentially affected by the release, subsurface soil conditions, locations of subsurface sewers, climatological conditions, and land use;
 - results of the site check and the NAPL investigations described above;
 - determination of the extent of the on-site contaminated area (soil and groundwater) and of all potential exposure pathways;
 - identification of all potential exposure pathways; and
 - classification of the site to determine the degree and nature of the release and to identify potential receptors in order to determine the degree of threat the release poses to public health and safety.

Within 45 days of release confirmation, you must submit the information collected using the agency's Assessment Report Form (TCEQ-00562) found at: www.tceq.texas.gov/assets/public/remediation/rpr/documents/0562.doc. Submit your completed form to the PST Program, TCEQ, MC-137, P.O. Box 13087, Austin, Texas 78711-3087.

3. **Removal of NAPL** (see 30 TAC 334.79). If site investigations indicate the presence of NAPL, you must remove NAPL to the maximum extent practicable (as determined by the TCEQ). When removing NAPL you must meet all requirements outlined in 30 TAC 334.79.
4. **Investigation for soil and groundwater cleanup** (see 30 TAC 334.80). You must conduct investigations to determine the full extent and location of contaminated soils and the presence of groundwater contamination if any of the following conditions exist:
- There is evidence that groundwater wells have been affected by the release.
 - NAPL is found to need recovery in compliance with 30 TAC 334.79.
 - There is evidence that contaminated soils may be in contact with groundwater.
 - The TCEQ requests an investigation, based on the potential effects of contaminated soil or groundwater on nearby surface water or groundwater resources.
 - You should submit information collected to the agency as soon as practicable, or by the schedule established by the TCEQ.
5. **Corrective action plan** (see 30 TAC 334.81). After reviewing the facility's investigation information, the agency may request that you develop and submit a corrective action plan for responding to contaminated soils and groundwater. If a plan is required, you must:

- Develop and submit the plan according to the schedule and format established by the agency. *Factors considered during review of your submitted plan are outlined in 30 TAC 334.81(b).*
 - Upon approval from the agency, implement the plan, including any requested revisions to the plan.
 - Monitor, evaluate, and report the results of implementing the plan according to the schedule and format established by the agency. Note: continued monitoring of soil, vapors, groundwater, and surface water may be required.
 - Submit a signed statement certifying that the requirements of 30 TAC 334.81 and the procedures in the approved corrective action plan are complete (the agency will issue a closure letter in response to the certification letter).
6. **Public participation** (see 30 TAC 334.82). If your site requires corrective action, you must provide notice to members of the public directly affected by the release and planned corrective action. Proof of the notification must be submitted to the agency within 30 days of determination that off-site assessment is required. Notice may include (but is not limited to) public notice in newspapers, certified letters to households or businesses, or personal contacts.

Where should I report releases?

All suspected or confirmed releases should be reported to the TCEQ Remediation Division at 512-239-2200 or to the Emergency Response hot line at 800-255-3924. You may use TCEQ form 20097 to fulfill this requirement, available at www.tceq.texas.gov/assets/public/remediation/rpr/documents/20097.docx.

Additionally, if a spill presents an imminent danger of fire, explosion, or toxic vapors, the local fire department and any other designated city officials and response personnel should be notified immediately (for example, a spill into a storm sewer could result in an explosion).

If you are using insurance as your financial-assurance choice, you should also notify your insurance company of the suspected release. Insurance policies have a time limit to report releases; failure to meet these limits may be grounds for your insurance company to deny coverage or payment.

What release reporting records do I need to keep?

Maintain your release detection records for at least five years. You should also keep records to document reporting and investigating activities for any releases, including the results of all system tests. For confirmed releases, also keep documentation of required corrective actions taken.

Who can conduct major system repairs and assess affects at my site?

Only personnel who are registered or licensed in Texas can perform major system repairs and environmental assessments:

- Licensed UST on-site supervisors can perform actions to repair tank or piping leaks or ruptures.
- Once a release is confirmed, a leaking petroleum storage tank corrective action project manager (CAPM) and a registered corrective action specialist (CAS) must be retained to evaluate the extent of the spill, oversee site cleanup of surface and subsurface contamination, and instigate the necessary steps to ensure site closure.

Instructions on how to find UST contractors, CASs, and CAPMs is provided in the next heading of this publication.

Where do I find more information?

Complete requirements for release reporting and corrective action are in 30 TAC 334.71 through 334.85 available at [texreg.sos.state.tx.us/public/readtac\\$ext.ViewTAC?tac_view=5&ti=30&pt=1&ch=334&sch=D&rl=Y](http://texreg.sos.state.tx.us/public/readtac$ext.ViewTAC?tac_view=5&ti=30&pt=1&ch=334&sch=D&rl=Y).

Resources for PST facilities are available on our website at www.tceq.texas.gov/remediation/pst_rp/downloads.html.

Requirements for tanks in the Edwards Aquifer are in 30 TAC 213 available at [texreg.sos.state.tx.us/public/readtac\\$ext.ViewTAC?tac_view=4&ti=30&pt=1&ch=213](http://texreg.sos.state.tx.us/public/readtac$ext.ViewTAC?tac_view=4&ti=30&pt=1&ch=213).

Requirements for tanks over other aquifers are in 30 TAC 214 available at [texreg.sos.state.tx.us/public/readtac\\$ext.ViewTAC?tac_view=4&ti=30&pt=1&ch=214&rl=Y](http://texreg.sos.state.tx.us/public/readtac$ext.ViewTAC?tac_view=4&ti=30&pt=1&ch=214&rl=Y).

Our Small Business and Local Government Assistance Program has information designed to assist tank owners and operators online at www.tceq.texas.gov/assistance/industry/pst/.

The Remediation Division's regulatory guidance document, *Investigating and Reporting Releases from Petroleum Storage Tanks* (TCEQ publication RG-411), also has additional guidance on investigating and responding to releases from PSTs, available online at www.tceq.texas.gov/assets/public/comm_exec/pubs/rg/rg-411.pdf.

Search for publications on the TCEQ Web site 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 hot line at 800-447-2827 or online at www.TexasEnvirohelp.org.

To find UST contractors, CASs, and CAPMs within your area:

1. Go to our online TCEQ Search Licensing or Registration Information tool at www2.tceq.texas.gov/lic_dpa/index.cfm.
2. Click the “Group Search Criteria” link.
3. Select the appropriate “Program.”
 - a. **To find CAPMs and CASs**, choose “Leaking Petroleum Storage Tanks Licensing (LPSTOL)” under the “Program” menu, then:
 - i. Select (or enter) the city, ZIP code, county, or TCEQ region (or a combination of these criteria).
 - ii. Click “Search.”
 - iii. The screen navigates to a listing of licensed contractors within the locale you defined. Click the name of any contractor in the list, which will navigate to a new screen with details about the types of licensing the contractor holds, how to contact them, and whether the work that they perform is applicable to your site. Please note that all licenses or registrations must be listed as “current,” meaning that the holder has met continuing education requirements and is in good standing.
 - b. **To find contractors for tank installation, removal, or repair services**, choose “Underground Storage Tank Licensing (USTOL)” from the “Program” menu and then specify your site location (as described in 3.a.i through 3.a.iii of this heading).

Please note that all licenses or registrations must be listed as “current,” meaning that the holder has met continuing education requirements and is in good standing.



Financial Assurance for Petroleum Storage Tanks

A guide for owners and operators of USTs

This is a general guide to laws and regulations for underground storage tanks and an aid in minimizing potential risks; it does not replace those laws and regulations, which take precedence over any information in this publication. If your UST system is located in Kinney, Uvalde, Medina, Bexar, Comal, Hays, Travis, or Williamson county, additional requirements related to protecting the Edwards or the Trinity aquifer may apply (Title 30, Texas Administrative Code [30 TAC], Chapters 213 and 214). In addition to the laws and TCEQ rules, 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 laws and regulations.

What is financial assurance?

Financial assurance is the ability to pay for a cleanup of a leak or release from the UST system. It is also known as financial responsibility and should be an approved mechanism, such as insurance.

Under 30 TAC Chapter 37, Subchapter I, owners or operators of USTs must demonstrate financial assurance for **corrective action** and **third-party liability**.

Financial assurance for corrective action covers the cost of action to remediate the effects of an accidental release arising from the operation of a UST.

Financial assurance for **third-party liability** compensates third parties for bodily injury and property damaged caused by accidental releases arising from the operation of a UST.

Only one person, the owner or operator, is required to demonstrate financial assurance; however, both owner and operator are liable in the event of noncompliance.

Why do I need it?

It is particularly important that someone be prepared to pay for cleanup so that it can begin as quickly as possible. Without fast action at a site, contamination can spread and significantly increase the chance of damage to the environment and human health.

Complying with the financial responsibility requirements also protects you as an owner or operator of USTs. If your UST leaks, you may be faced with expensive cleanup costs and with lawsuits brought by third parties.

Evidence of financial assurance (e.g., an insurance-policy “endorsement” page) must accompany all self-certification forms. The TCEQ will not issue delivery certificates until it has verified acceptable financial assurance. In addition, failure to produce evidence of financial assurance when requested by an inspector or other TCEQ employee could result in violations, fines, or shutdown.

What are my options?

You may choose from any of the options listed for financial assurance:

- **insurance**—obtained from an insurance agent
- **financial test**—self-insurance used by only the largest companies
- **corporate guaranty**—self-insurance provided by a parent company of the owner or operator*
- **surety bond**—obtained from an insurance agent*
- **letter of credit**—obtained from a financial institution such as a bank*
- **trust**—set up with a financial institution such as a bank
- **local-government financial test**—self-insurance for local governments

Regardless of the option you choose, you must have a mechanism worded exactly as required by 30 TAC, Chapter 37, Subchapter I. Mechanisms worded per federal regulations in Title 40, Code of Federal Regulations, Chapter 280 are not acceptable, with the exception of the local government financial test which should be worded in accordance with that chapter.

Tank Insurance

Insurance is the most common financial assurance mechanism selected by owners or operators. General liability policies do not cover pollution events and don't meet regulatory requirements. In the industry, the required insurance is sometimes known as *pollution liability for underground storage tanks*. Most major insurance companies will supply the certificate of insurance required by 30 TAC 37 as evidence of coverage within the policy. Make sure the information on the certificate regarding the tank owner or operator and the number and location of tanks exactly matches the information reflected on your registration forms.

Rules also allow an endorsement worded in accordance with 30 TAC 37 in lieu of a certificate of insurance, but such endorsements are not used by insurance companies. Certificates from the Association for Cooperative Operations Research and Development (ACORD) are included with policies but are not acceptable proof of coverage.

How much coverage is needed?

Financial assurance has both **per occurrence** and **annual aggregate** requirements for minimum coverage.

- **Per occurrence** refers to the amount of funds that must be available to pay the costs from each occurrence of a leaking UST.
- **Annual aggregate** is the total amount of funds available for all accidental leaks that might occur in one year.

The amount of financial-responsibility coverage you need is determined by the type of business you operate, the amount of throughput of your tanks, and the number of

* In addition, this mechanism requires that a separate unfunded, standby trust be established.

tanks you own. If you have one or more tanks at a petroleum marketing (retail) facility, you must have the following coverage:

- If you own 100 tanks or **fewer**, you must demonstrate that you have coverage of \$1 million per occurrence and \$1 million annual aggregate.
- If you own **more** than 100 tanks, you must demonstrate that you have coverage of \$1 million per occurrence and \$2 million annual aggregate.

If your tanks are not located at a petroleum production, refining, or marketing facility and you have a monthly throughput of 10,000 gallons or less for all tanks, you need \$500,000 per occurrence. If your facility has more than a monthly throughput of 10,000 gallons, you must have at least \$1 million per occurrence. The required per-occurrence and annual-aggregate coverage amounts do not in any way limit the liability of the owner or operator. Tank owners may find that higher coverage limits are not much more expensive.

How long do I need to keep financial assurance?

You must maintain financial assurance until the tanks are properly removed from service or, if corrective action is required, until the action is completed. If you no longer have financial assurance, any remaining product must be removed from tanks within 90 days after financial assurance terminates unless the owner or operator renews the financial-assurance mechanism.

The TCEQ recommends that you maintain financial assurance until you have received notice from the TCEQ that no release has occurred.

Filing an Insurance Claim

Tank owners or operators should be aware of their insurance policy's requirements for filing a successful insurance claim. Pay particular attention to the following:

- **Technical compliance** with tank regulations, including proper use of release-detection methods, may affect your ability to make a successful claim.
- **Prompt reporting** of suspected or confirmed releases and filing a claim within a specific time period may be required. Suspected or confirmed releases must be reported to the TCEQ within 24 hours of their occurrence. This is also a good time to notify your insurance company of the suspected or confirmed release.
- **Sale or transfer** of a business or property does not transfer policy coverage to a new tank owner. New coverage must be obtained.
- **Pre-existing contamination** may pose issues for coverage for cleanup; be sure to investigate property conditions.

What records do I need to keep?

You must maintain a financial assurance mechanism worded exactly as required by 30 TAC 37, Subchapter I, for the type of mechanism selected at the UST site or at your place of business and it must be supplied to the TCEQ upon request. Records maintained off-site must be made available in a timely manner. Keep the records until your UST site is properly closed.

- If you are using an insurance policy or risk retention group coverage, you must maintain a copy of the signed policy, with the endorsement or certificate of insurance and any amendments to the agreements.
- When using a financial test (including a local-government financial test) or a guarantee, you must maintain a copy of the chief financial officer's letter based on year-end financial statements for the most recent completed financial-reporting year. This documentation must be redone each year within 120 days after the close of the financial reporting year.
- If you are using a guarantee, surety bond, or letter of credit, you must maintain a copy of the signed standby-trust-fund agreement and copies of any amendments to the agreement.

Where do I find more information?

The complete requirements for financial assurance may be found in 30 TAC 37, Subchapter I.

For questions concerning financial assurance, please contact the Financial Assurance Section at 512-239-0300.

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>



Gasoline Vapor Recovery

A guide for owners and operators of USTs

This is module j of the PST Super Guide, a comprehensive guide to issues relating to petroleum storage tanks (PSTs). This super guide provides an overview to laws and regulations for PSTs and can be used as an aid in minimizing potential risks. The guide does not replace those laws and regulations which take precedence over any information in this publication.

Module j explains applicability and compliance with the vapor recovery rules at gasoline dispensing facilities.

- You, the owner or operator of a PST, are responsible for ensuring compliance with all applicable laws and regulations.
- If your UST system is located in Kinney, Uvalde, Medina, Bexar, Comal, Hays, Travis, or Williamson County, additional requirements related to protecting the Edwards or the Trinity Aquifer may apply (Title 30, Texas Administrative Code [30 TAC], Chapters 213 and 214).
- In addition to the laws and TCEQ rules, local governments and other state and federal agencies may have rules that apply.

What is gasoline vapor recovery?

The federal Clean Air Act includes special rules for areas that do not meet the national ambient air quality standards. The Act requires each state to develop and execute a State Implementation Plan (SIP). These SIPs include measures to deal with pollution, such as implementing vapor control requirements for gasoline dispensing facilities (GDFs).

Stage I vapor recovery captures vapors released when gasoline is delivered to a storage tank. The vapors are returned to the tank truck as the storage tank is being filled with fuel, rather than released to the ambient air. Owners and operators of GDFs must comply with state regulations for their Stage I vapor recovery system. Depending on their monthly throughput and location, facilities are subject to Stage I recordkeeping, testing, inspection, and control requirements. See Figure 1.

What is the purpose of vapor recovery?

Stage I equipment decreases the amount of gasoline vapors released into the atmosphere during tank refilling. Gasoline is a complex mixture of hundreds of chemical compounds. Repeated or prolonged exposure to some of those compounds could pose a health risk to humans. In addition, some elements of gasoline vapors called *volatile organic compounds* contribute to the formation of ground-level ozone. Ozone is the primary component of smog.

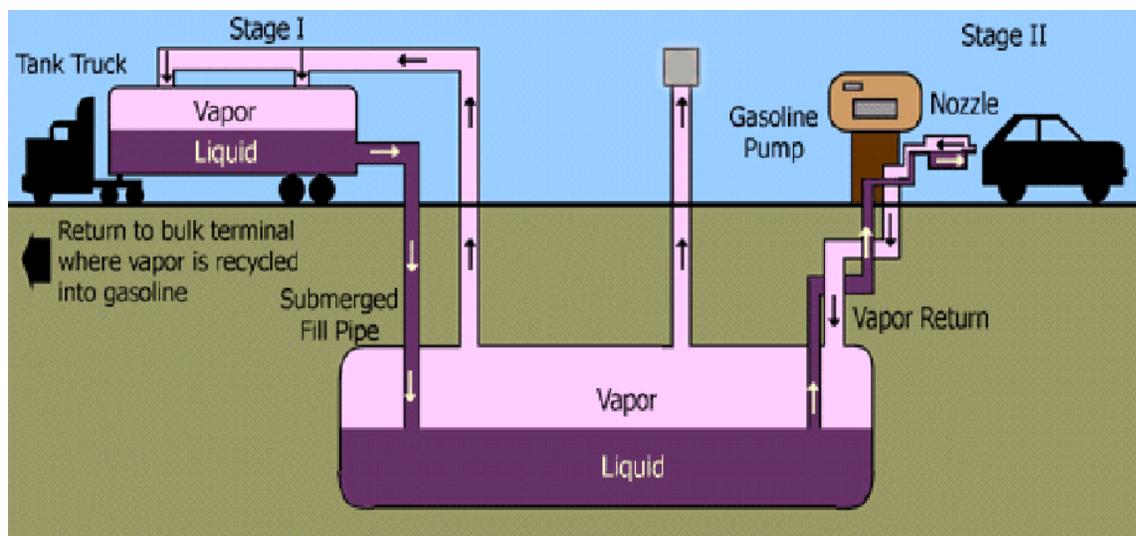


Figure 1. Stage I and II[†] vapor recovery.

[†] Stage II captures gasoline vapors when a vehicle is being fueled at a dispenser and the vapors are returned through the dispenser hose to the tank. GDFs are no longer required to be equipped with Stage II Vapor Recovery equipment.

Am I required to have Stage I?

Applicability of the Stage I vapor recovery rules is determined by the county in which the GDF is located and the gallons of gasoline dispensed from the facility in a month (monthly throughput). Use the list of counties in Table 1 to determine whether your facility is required to have Stage I vapor recovery equipment. You should be able to find your monthly throughput listed on your inventory control sheet as “Total monthly gallons dispensed.”

If your facility is located in an affected county and dispenses more than the monthly throughput listed for that county, your facility is subject to the Stage I rules. If your facility is located in an affected county and dispenses less than the monthly throughput listed for that county, it is exempt from the requirements of the Stage I rule, with a few exceptions. Monthly throughput exemptions can be found in 30 TAC 115.227. For more information, visit our Stage I Vapor Recovery webpage at <www.tceq.texas.gov/goto/stageI>.

Table 1. Counties requiring Stage I.

Affected Counties	Monthly Throughput
Brazoria, Chambers, Collin, Dallas, Denton, El Paso, Fort Bend, Galveston, Hardin, Harris, Jefferson, Liberty, Montgomery, Orange, Tarrant, Waller, and Wise*	Any amount*
Ellis, Johnson, Kaufman, Parker, Rockwall	More than 10,000 gallons of gasoline in any month after April 30, 2005
Bastrop, Bexar, Caldwell, Comal, Guadalupe, Hays, Travis, Williamson, Wilson**	More than 25,000 gallons of gasoline in any month after December 31, 2004**
Anderson, Angelina, Aransas, Atascosa, Austin, Bee, Bell, Bosque, Bowie, Brazos, Burleson, Calhoun, Camp, Cass, Cherokee, Colorado, Cooke, Coryell, De Witt, Delta, Falls, Fannin, Fayette, Franklin, Freestone, Goliad, Gonzales, Grayson, Gregg, Grimes, Harrison, Henderson, Hill, Hood, Hopkins, Houston, Hunt, Jackson, Jasper, Karnes, Lamar, Lavaca, Lee, Leon, Limestone, Live Oak, Madison, Marion, Matagorda, McLennan, Milam, Morris, Nacogdoches, Navarro, Newton, Nueces, Panola, Polk, Rains, Red River, Refugio, Robertson, Rusk, Sabine, San Augustine, San Jacinto, San Patricio, Shelby, Smith, Somervell, Titus, Trinity, Tyler, Upshur, Van Zandt, Victoria, Walker, Washington, Wharton, Wood**	100,000 gallons or more in any month after October 31, 2014**

* If your facility is in the Beaumont–Port Arthur, Dallas–Fort Worth, El Paso, or Houston-Galveston-Brazoria area, it may be exempt from the Stage I rules if it has dispensed no more than 10,000 gallons of gasoline in any calendar month after January 1, 1991, and construction began before November 15, 1992. The TCEQ may request verification of throughput by monthly inventory control records, so be sure to maintain those records.

** If your facility is in a covered attainment county [30 TAC 115.10(10)] and the capacity of the stationary gasoline storage containers is no more than 1,000 gallons, your facility is exempt from the Stage I rule, with a few exceptions.

What are the requirements for Stage I systems?

For Stage I vapor recovery systems, you must comply with the following:

- Control displaced vapor emissions using either:
 - a vapor control system operated in accordance with 30 TAC 115.221(1), or
 - a vapor balance system which must be operated according to the conditions found in 30 TAC 115.222.
- Inspect for liquid leaks, visible vapors, and significant odors during gasoline deliveries. Immediately discontinue delivery if any of those items is observed, and do not resume until the observed issue is remedied.

- Ensure that the gasoline tank truck has been inspected for leaks within the most recent year.
- Conduct annual testing procedures according to 30 TAC 115.225. These two tests are:
 - California Air Resources Board Vapor Recovery Test Procedure TP-201.1E: Leak Rate and Cracking Pressure of Pressure/Vacuum Vent Valves.
 - California Air Resources Board Vapor Recovery Test Procedure TP-201.3: Determination of 2 Inch WC Static Pressure Performance of Vapor Recovery Systems of Dispensing Facilities.
- Keep records of dates on which gasoline was delivered to your facility and the identification number and date of the last leak testing of each tank-truck's tank from which gasoline was transferred to the facility.
- Maintain the following records for two years:
 - a record of the test results of any testing conducted at the facility, and
 - monthly inventory records to show gasoline throughput.

Your facility must also be equipped with pressure-vacuum relief valves on the storage tank vent lines, two-point connections for vapor recovery during fuel delivery, and drop tubes that extend to within 6 inches of the tank bottom. All Stage I equipment must be certified by the California Air Resources Board (CARB) or an approved third party.

In addition, all GDFs with a monthly throughput of more than 10,000 gallons must have a drop tube that extends to within 12 inches of the tank bottom if the pipes were installed on or before November 9, 2006, or within 6 inches of the tank bottom if the pipes were installed after November 9, 2006, regardless of county. A list of approved Stage I equipment is available at the TCEQ's website; a link appears at the end of this guide.

Additional requirements may apply depending on your throughput and location. Please refer to EPA publication EI 43-02, *Summary of Regulations Controlling Air Emissions*, for more information (see the link at the end of this guide).

What are the requirements for facilities exempt from Stage I?

If your facility is located in an affected county and is exempt from the rule based on monthly throughput, you must still comply with the following requirements:

- Ensure there are no avoidable gasoline leaks in the liquid transfer or vapor balance systems.
- Ensure that the tank truck is kept vapor-tight after unloading.
- Inspect for liquid leaks, visible vapors, and significant odors during gasoline deliveries. Immediately discontinue delivery if any of those items is observed, and do not resume until the issue is remedied.

- Maintain monthly inventory records to show gasoline throughput. This requirement does not apply to facilities located in a covered attainment area with a stationary gasoline-storage capacity of 1,000 gallons or less.

What are the requirements for Stage II decommissioning?

Owners or operators of GDFs are no longer required to install Stage II equipment, which captures gasoline vapors when a vehicle is being fueled at a dispenser. All existing Stage II vapor recovery equipment must be completely decommissioned as of **August 31, 2018**. If your Stage II equipment has not been decommissioned, you must do so as soon as possible. Until decommissioning is complete at your facility, you must continue to maintain all current Stage II requirements, including daily logs, equipment maintenance, and testing. For more information on Stage II requirements, please go to www.tceq.texas.gov/airquality/mobilesource/vapor_recovery.html/#Stage2.

You or your licensed UST Contractor must submit a Decommissioning Notification Form (TCEQ-20698) to the appropriate TCEQ regional office and local government program at least 30 calendar days before any physical decommissioning activities begin. Additionally, a one- to three-day notice must be given verbally beforehand. Following decommissioning, a report with test results must be submitted to the appropriate TCEQ regional office. A licensed Underground Storage Tank On-Site Supervisor with an A or A/B license must direct the decommissioning, and during decommissioning, all Stage II equipment must be removed from the site.

Where can I find more information?

Stage I Vapor Recovery: www.tceq.texas.gov/goto/stageI

The complete requirements for Stage I and II, 30 TAC Chapter 115, Subchapter C:
[https://texreg.sos.state.tx.us/public/readtac\\$ext.ViewTAC?tac_view=5&ti=30&pt=1&ch=115&sch=C](https://texreg.sos.state.tx.us/public/readtac$ext.ViewTAC?tac_view=5&ti=30&pt=1&ch=115&sch=C)

Stage I and II gasoline vapor recovery, list of approved equipment, other information:
www.tceq.state.tx.us/goto/vapor_recovery

Vapor Recovery Test Procedures Handbook (RG-399):
http://www.tceq.texas.gov/assets/public/comm_exec/pubs/rg/rg-399.pdf

Download TCEQ forms: www.tceq.texas.gov/search_forms.html

EPA guide to Stage I (publication no. EI 43-02): www.epa.gov/ttn/atw/area/gdfb.pdf

Search agency publications at the TCEQ's website:
<http://www.tceq.texas.gov/publications>

For information about installation or renovation of Stage I equipment or decommissioning Stage II equipment, please refer to module RG-475c, Licensed Underground Storage Tank Contractors.

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



TCEQ REGULATORY GUIDANCE

Program Support and Environmental Assistance Division
RG-475k • Revised August 2019

Who Regulates Petroleum Storage Tanks?

A guide for owners and operators of USTs

This document was developed to be used as a general guide to the agencies involved with regulating storage-tank systems, whether underground or aboveground. This guide is not necessarily comprehensive, and it is possible that your tanks may be regulated by authorities not listed below. It is the responsibility of the tank owner and operator to ensure compliance with the regulations of all interested governing bodies.

State Agencies Other than the TCEQ

While TCEQ regulations cover many of the requirements for petroleum storage tanks, there are other state agencies that also have regulatory requirements for PSTs.

Texas Department of Insurance (State Fire Marshal)

Source of information on rules and regulations affecting underground storage tanks (USTs) and aboveground storage tanks (ASTs) that could pose a threat to public safety due to fire or explosion hazard. Always contact the local fire marshal in any type of emergency involving a PST. The State Fire Marshal's Office can supply the name and number of a local fire marshal and answer questions that the local fire marshal cannot.

Phone: 512-305-7900

Toll-free: 800-578-4677

Web: <www.tdi.texas.gov>

Texas Department of Agriculture (Weights and Measures)

The Weights and Measures Program inspects fuel dispensers at service stations to ensure that they meet TDA standards. A TDA sticker should be displayed on all retail dispensers.

Phone: 512-463-7401

Toll-free: 800-835-5832

Web: <texasagriculture.gov/RegulatoryPrograms/WeightsandMeasures.aspx>

Texas Department of Public Safety (Commercial Vehicle Enforcement)

Source of information on the requirements pertaining to the transport of hazardous materials (including fuel or empty fuel tanks) on highways.

Phone: 512-424-2116

Web: <dps.texas.gov/DriverLicense/hme.htm>

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY • PO BOX 13087 • AUSTIN, TX 78711-3087

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Printed on recycled paper. **How is our customer service?** tceq.texas.gov/customersurvey

Texas General Land Office (Oil Spill Division)

The GLO has jurisdiction over any AST or UST that could cause spills that could reach coastal waters.

Toll-free: 800-998-4456

Web: <www.glo.texas.gov/coast/oil-spill/overview>

Texas Railroad Commission (Oil and Gas Division)

The Railroad Commission regulates tanks associated with the exploration, development, or production of oil, gas, or geothermal resources and exempt from regulation by the TCEQ.

Phone: 512-463-7288

Web: <www.rrc.state.tx.us/>

Texas State Comptroller of Public Accounts (Fiscal Management Division)

Source of information on the collection by bulk facility operators of the fuel surcharge destined for the Petroleum Storage Tank Remediation Fund.

Toll-free: 800-252-1383

Web: <<https://fm.cpa.state.tx.us/fm/>>

Other Regulators within the TCEQ

Edwards Aquifer Authority

Regulates USTs and ASTs that could pose a threat to the Edwards Aquifer.

Phone: 210-222-2204

Toll-free: 800-292-1047

Web: <www.edwardsaquifer.org>

You may be subject to additional TCEQ rules if your UST or AST system is located above or near the Edwards or the Trinity aquifer. Rules concerning the Edwards Aquifer can be found in Title 30, Texas Administrative Code, Chapter 213; the Trinity Aquifer, Chapter 214. Penalties may be enhanced for those not in compliance with those rules. For more information, contact the TCEQ Austin Region office at 512-239-2929 or the San Antonio Region office at 210-490-3096.

Tier II Chemical Reporting Program

Effective Sept. 1, 2015, the Tier II Chemical Reporting Program moved to the TCEQ from the Department of State Health Services. Any facility required under regulations of the Occupational Safety and Health Administration (OSHA) to maintain MSDSs or SDSs for hazardous chemicals stored or used in the work place with amounts that equal or exceed the following thresholds must report:

- Extremely hazardous substances (Title 40, Code of Federal Regulations, Part 335, Appendixes A and B), either 500 pounds or the threshold-planning quantity, whichever is lower.

- For gasoline at a retail gas station, 75,000 gallons
- For diesel fuel at a retail gas station, 100,000 gallons
- For all other hazardous chemicals, 10,000 pounds

Toll-free: 800-452-2791

Web: <www.tceq.texas.gov/permitting/tier2/>

Federal Government

U.S. Department of Labor (OSHA)

Health and safety requirements pertaining to USTs and ASTs.

Toll-free: 800-321-6742

Web: <www.osha.gov/>

U.S. Environmental Protection Agency

Information on the spill-prevention, control, and countermeasure (SPCC) rule appears in Title 40, Code of Federal Regulations, Part 112. It gives requirements for oil-spill prevention, preparedness, and response—specifically aimed at preventing discharges of oil into navigable waters and adjoining shorelines. The rule requires specific facilities to prepare, amend, and implement SPCC Plans.

Phone: 214-665-6444

Toll-free: 800-887-6063

Web: <www.epa.gov/oil-spills-prevention-and-preparedness-regulations/overview-spill-prevention-control-and>

Local Government

With regard to any UST or AST system, local government officials representing any relevant cities, counties, river authorities, and special districts (such as underground water districts or water control and improvement districts) should always be contacted to determine whether local regulations might be stricter than the state or federal regulations. For example, some cities have more stringent secondary containment requirements, and others will not allow a tank to be abandoned in place. Additionally, requirements about placement, design, and placarding and certain restrictions relating to fire and explosion hazards apply to ASTs, and are usually controlled by the local fire authority. Contact the local fire authority before the installation of any AST to ensure that their design and placement meet local fire codes.



Temporarily Removing Petroleum Storage Tanks from Service

A guide for owners and operators of USTs

This is a general guide to laws and regulations for underground storage tanks and an aid in minimizing potential risks; it does not replace those laws and regulations, which take precedence over any information in this publication. If your UST system is located in Kinney, Uvalde, Medina, Bexar, Comal, Hays, Travis, or Williamson county, additional requirements related to protecting the Edwards or the Trinity aquifer may apply (Title 30, Texas Administrative Code [30 TAC], Chapters 213 and 214). In addition to the laws and TCEQ rules, 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 laws and regulations.

Why would I want to temporarily remove my tanks from service?

The TCEQ requires that you temporarily remove your tanks from service when your UST system is no longer required for its intended purpose as explained in 30 TAC §334.54(a). There is always a risk that your tank will release a regulated substance, leading to costly remediation and cleanup fees. To minimize your risk, when your operations temporarily do not require the UST, you should consider emptying it. If you do not plan to use a tank in the future you should budget to permanently remove it from service (see module RG-475m, *Permanently Removing Petroleum Storage Tanks from Service*).

Note: All USTs installed on or before December 22, 1988, should have been upgraded to meet the technical standards for existing UST systems according to the implementation schedule listed in 30 TAC §334.44. If your tank was installed on or before December 22, 1988, and does not meet the technical standards in 30 TAC §334.47, it must follow the requirements for permanent removal from service (see module RG-475m).

What are my options?

If you are considering temporarily removing your UST from service, you can either leave the regulated substance in the tank or have the substance removed.

In accordance with 30 TAC §334.54(d), if you remove the regulated substance from the tank and it is considered “empty,” and if you have checked for releases and performed any necessary corrective action, you are not required to maintain release detection or financial assurance (see the definition of *empty* in the next section).

However, it is recommended that that you retain an invoice and any written documentation from the company that is removing the regulated substance.

Note: If your financial assurance terminates, you must empty your tanks within 90 days or re-obtain financial assurance.

When is my UST considered empty?

For your UST to be classified as empty, all of the following criteria must be met:

- All regulated substances have been removed as completely as possible by accepted industry procedures.
- Any residue from stored regulated substances which remains in the system does not exceed a depth of 2.5 centimeters and does not exceed 0.3 percent by weight of the system at full capacity.
- The volume or concentration of regulated substances remaining in the system will not pose an unreasonable risk to human health or safety or to the environment.

How do I temporarily remove my UST from service?

When temporarily removing your UST from service, you must maintain the system at a standard that prevents contamination of soil and groundwater.

- File an amended UST registration within 30 days of temporary removal of service using the UST Registration and Self-Certification Form (TCEQ-00724).
- Keep all vent lines open and functioning to prevent vapors building up and potentially causing an explosion.
- Cap, plug, or lock piping, pumps, manways, tank access points and ancillary equipment to prevent access, tampering, or vandalism by unauthorized persons.
- Maintain corrosion protection at all times.
- Maintain operator training requirements and continue retraining every three years.
- Unless the UST is emptied of all regulated substances, maintain an approved release detection method and financial assurance.

If a release of a regulated substance is suspected or confirmed, the owner or operator must comply with all requirements for release reporting, investigation, and corrective action.

How do I return my UST to service?

The following steps must be taken before returning the system to service:

- At least 30 days beforehand, notify the TCEQ regional office using the Aboveground and Underground Storage Tank Construction Notification Form (TCEQ-00495).
- For any system out of service for more than six months, have a certified technician complete both tank and piping tightness tests to detect a release as small as 0.1 gallon per hour.

- Ensure that an approved method of release detection is in use.
- Obtain acceptable financial assurance.
- Ensure that approved methods of spill and overflow prevention and control are in use.
- File an amended UST registration within 30 days after returning your UST to service using the UST Registration and Self-Certification Form (TCEQ-00724).

What records must I keep while my UST is temporarily out of service?

At a minimum, records of the following must be maintained for at least five years after the UST system is temporarily removed from service:

- The date of temporary removal from service.
- The name, address, and telephone number of any person who prepared the UST system for temporary removal from service.
- The procedures used to prepare and empty the system.
- Any requests for, and approvals of, extensions of time.

Once the UST has been returned to service, maintain the following information:

- the date returned to service;
- the name, address, and telephone number of any person who conducted the tank and piping tightness tests; and
- the results of the tank and piping tightness tests.

Where do I find more information?

The complete requirements for temporary removal from service for an UST are at 30 TAC 334.54 and 30 TAC 37, Subchapter I.

Additional information on management of USTs can be found in the following TCEQ publications:

- *Licensed Underground Storage Tank Contractors* (RG-475c)
- *Permanently Removing Petroleum Storage Tanks from Service* (RG-475m)
- *Protecting Petroleum Storage Tanks against Corrosion* (RG-475f)
- *Petroleum Storage Tank Release Detection and Inventory Control* (RG-475g)
- *Suspected Releases from Petroleum Storage Tanks* (RG-475h)
- *Petroleum Storage Tank Spill and Overflow Prevention* (RG-475e)
- *Financial Assurance for Petroleum Storage Tanks* (RG-475i)

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

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 <TexasEnviroHelp.org>.



Permanently Removing Petroleum Storage Tanks from Service

A guide for owners and operators of USTs

This is module m of the PST Super Guide, a comprehensive guide to issues relating to petroleum storage tanks (PSTs). This super guide provides an overview to laws and regulations for PSTs and can be used as an aid in minimizing potential risks. The guide does not replace those laws and regulations which take precedence over any information in this publication.

Module m explains the rules and procedures for permanently removing an underground storage tank from service.

- You, the owner or operator of a PST, are responsible for ensuring compliance with all applicable laws and regulations.
- If your UST system is located in Kinney, Uvalde, Medina, Bexar, Comal, Hays, Travis, or Williamson County, additional requirements related to protecting the Edwards or the Trinity Aquifer may apply (Title 30, Texas Administrative Code [30 TAC], Chapters 213 and 214).
- In addition to the laws and TCEQ rules, local governments and other state and federal agencies may have rules that apply.

Why would I want to permanently remove my tanks from service?

There is always a risk that your tank will release a regulated substance, leading to remediation and cleanup costs. To minimize your risk, when your operations no longer require the service of a UST, you should permanently remove it. Additionally, in tank systems that do not meet applicable technical standards, as described in Chapter 334, Subchapter C, you may be required to repair, upgrade, or permanently remove them from service, as applicable.

What are my options?

There are three options for permanently removing your UST from service: remove the tank from the ground, permanently fill the tank in place, or conduct a permanent change in service (e.g., to storage of a non-regulated substance). Each option has benefits and disadvantages. Regardless of the chosen option, a demonstration that no prior release of a stored regulated substance has occurred from your UST system must be made in accordance with 30 TAC 334.55.

1. Removing the tank from the ground eliminates the chance of future soil contamination. However, it may not be a viable solution if the UST is under a permanent structure.

2. Permanently filling your UST with an inert material may make your property harder to sell in the future, as compared with removal from the ground. You should also contact the city and county governments to make sure abandonment in place is allowed in your locality.
3. If you carry out a change in service, you must use your UST for a beneficial purpose and the tank must be thoroughly cleaned of all regulated substances prior to reuse. Thoroughly cleaning the UST to prevent contamination of the new non-regulated stored substance is difficult and may be impractical.

In addition to the benefits and disadvantages of each option, the cost associated with each may vary. To determine the best solution, you should discuss the benefits, disadvantages, and costs of each option with your TCEQ-registered contractor.

What requirements apply to each option?

In addition to the general requirements that apply to permanent removal from service, there are specific requirements for each option (Table 1).

Table 1. Requirements that apply to permanent removal of USTs from service.

	<i>Remove Tank from Ground</i>	<i>Permanently Fill Tank</i>	<i>Change in Service</i>
Notify TCEQ 30 days prior to removal (submit Form TCEQ-00495)	X	X	X
Notify (and, if necessary, get approval from) local government and fire marshal	X	X	X
Notify TCEQ regional office 24 to 72 hours before removal	X	X	X
Empty UST of all regulated substance and accumulated sludge, and purge vapors	X	X	X
Collect samples and assess site to determine if any substances released (submit Form TCEQ-00621)	X	X	X
Empty; disconnect; and plug, cap, or remove tank, piping, and ancillary equipment	X	X	
Remove UST from site within 24 hours	X		
During temporary storage, ensure no ignition sources are present and prevent unauthorized personnel access	X	X	X
Do not store materials for human consumption in the tank	X	X	X

	Remove Tank from Ground	Permanently Fill Tank	Change in Service
Mark on the tank <i>flammable, unusable for storage of materials for human consumption</i> , and list its prior contents in lettering at least 2 inches high	X		
Fill tank with inert material		X	
Notify owners of abandoned tank		X	
Update UST registration form (submit Form TCEQ-00724)	X	X	X
Maintain records of removal	X	X	X

What records do I need to keep?

Generally, you should maintain records of installation and major repairs for the life of the UST and records of testing, inspections, basic maintenance, and daily operations for five years. Records of the following must be maintained for five years after the final UST is permanently removed from service:

- construction notification (Form TCEQ-00495) and TCEQ approval to permanently remove the UST from service;
- the location of the UST permanently removed from service;
- the date the UST was permanently removed from service;
- methods used to prepare and condition the UST for permanent removal from service;
- names, addresses, and phone numbers of all persons who permanently removed the UST from service;
- site-assessment reports;
- known substance releases; and
- for any UST removed from the ground, the methods used to handle, transport, store, and dispose of the tank.

What qualifications are required for a contractor who permanently removes a tank system from service?

The TCEQ administers registrations and licenses for UST contractors and supervisors. Any person or business entity that offers to undertake, represents itself as being able to undertake, or does undertake the installation, repair, or removal of a UST must hold a UST contractor registration issued by TCEQ. An individual supervising the installation, repair, or removal of a UST must hold an on-site supervisor license issued by TCEQ. An on-site supervisor must be present at the site at all times during the critical junctures of the installation, repair, or removal.

How can I find a registered UST contractor and licensed on-site supervisor in my local area?

You can find a UST contractor or supervisor in your local area by using the TCEQ website: <www.tceq.texas.gov/goto/ust_removal>. For additional information, see *Licensed Underground Storage Tank Contractors* (TCEQ publication RG-475c).

What are the sampling requirements for the permanent removal from service site assessment?

According to 30 TAC 334.55(a)(6), you must demonstrate that no prior release of a stored regulated substance (i.e. gasoline) has occurred from your UST system. The sampling methods, types, location, and number of samples required in order to make that demonstration depend on the characteristics of your site and are outlined in the guidance document, *Investigating and Reporting Releases from Petroleum Storage Tanks* (RG-411).

Your sampling must occur after submitting the construction notification (form TCEQ-0495), but before the permanent removal from service is complete. To ensure that any release of a regulated substance is detected and quantified, the rules require that you consider the following when designing your sampling plan:

- how your UST is being removed from service,
- characteristics of the regulated substance you stored,
- characteristics of the backfill material and surrounding soils,
- whether groundwater is present and, if so, its depth with relation to the UST system and the surface of the ground, and
- any other factors that may affect the reliability or effectiveness of the site assessment procedures or techniques.

The TCEQ recommends that, before any release-related investigation, you assemble information on local groundwater conditions (i.e., depth to water or formation type). Under the PST Program, it is the obligation of a responsible party to accurately represent the quality of the data submitted. For example, even if groundwater sampling is not specifically required by the agency at a particular site (based on site-specific circumstances), the owner or operator may choose to conduct it on their own initiative.

Additionally, maintain your financial assurance until sampling results have been obtained and corrective action (if required) has been completed.

Am I required to use a registered UST contractor to conduct soil and groundwater sampling?

It is not a requirement that a registered UST contractor take the samples for your UST site assessment. Rule 30 TAC 334.55 states that any “qualified personnel possessing the appropriate skills, experience, and competence to perform the assessment in accordance with recognized industry standards” are allowed to take the necessary samples. However, the person taking the samples must “be supervised by a person who is currently licensed by the TCEQ as a UST installer or on-site supervisor or currently registered with the TCEQ as a corrective action project manager.”

Can I empty my UST but not permanently remove it from service?

USTs that are emptied, cleaned, and secured, but not permanently removed from service, are considered temporarily removed from service. USTs temporarily removed from service must maintain corrosion protection and meet all the requirements of 30 TAC 334.54. For additional guidance, see *Temporarily Removing Petroleum Storage Tanks from Service* (RG-475l).

Where do I find more information?

The complete requirements for permanent removal of a UST from service can be found at 30 TAC 334.55.

<[https://texreg.sos.state.tx.us/public/readtac\\$ext.TacPage?sl=R&app=9&p_dir=&p_rloc=&p_tloc=&p_ploc=&pg=1&p_tac=&ti=30&pt=1&ch=334&rl=55](https://texreg.sos.state.tx.us/public/readtac$ext.TacPage?sl=R&app=9&p_dir=&p_rloc=&p_tloc=&p_ploc=&pg=1&p_tac=&ti=30&pt=1&ch=334&rl=55)>

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Aboveground Petroleum Storage Tanks

A guide for owners and operators of ASTs

This is module n of the PST Super Guide, a comprehensive guide to issues relating to petroleum storage tanks (PSTs). This super guide provides an overview to laws and regulations for PSTs and it can be used as an aid in minimizing potential risks. The guide does not replace those laws and regulations, which take precedence over any information in this publication.

Module n explains the rules and procedures for aboveground storage tanks (ASTs).

- You, the owner or operator of a PST, are responsible for ensuring compliance with all applicable laws and regulations.
- If your aboveground storage tank (AST) system is located in Kinney, Uvalde, Medina, Bexar, Comal, Hays, Travis, or Williamson County, additional requirements related to protecting the Edwards or the Trinity Aquifer may apply (Title 30, Texas Administrative Code [30 TAC], Chapters 213 and 214).
- In addition to the laws and TCEQ rules, local governments, and other state and federal agencies may have rules that apply.

How do I know if my AST is regulated?

TCEQ regulates ASTs with a capacity of more than 1,100 gallons that contain a petroleum product capable of propelling a motor vehicle or airplane (excluding naphtha- or kerosene-type jet fuel). TCEQ rules also state that petroleum product ASTs, not otherwise excluded or exempt, are subject to construction installation notification.

Is my AST excluded?

The following ASTs are excluded from regulation and registration:

- any tank with a capacity of 1,100 gallons or less;
- any emergency spill protection or emergency overflow containment tank that:
 - is used solely to temporarily contain or store petroleum products from a leak, spill, overfill or other unplanned release,
 - is emptied of any contained petroleum products within 48 hours of release discovery, and
 - is inspected for a release no less than every 30 days;
- any tank that contains petroleum products at such dilute concentrations that the mixture is not capable of being used as a fuel for the propulsion of a

motor vehicle or aircraft; and any release would not pose any significant threat to human health and safety or the environment; or

- a transformer or other electrical equipment that is used in the transmission of electricity.

Note: Excluded ASTs containing petroleum products are subject to construction notification requirements if located at a retail service station.

Is my AST exempt?

Tanks that meet certain specifications are exempt from regulation and registration. These include:

- a farm or residential tank with a capacity of 1,100 gallons or less used for non-commercial purposes;
- a tank used for storing heating oil that is used on the same premises;
- a flow-through process tank;
- a tank associated with the exploration, development, or production of oil, gas, or geothermal resources, or any other activity regulated by the Railroad Commission of Texas;
- a tank that is associated with a petrochemical plant, petroleum refinery, or electric generating facility;
- a septic tank;
- a surface impoundment pit, pond, or lagoon;
- a stormwater or wastewater collection system; or
- a tank located on or above the surface of the floor of an underground area, such as a basement, cellar, mineworking, drift, shaft, or tunnel, if the sole or principal substance in the tank is a hazardous substance.

If you claim an exemption for your tank, you must be prepared to provide appropriate documentation to support the claim at the request of the TCEQ. Documentation must support your exemption claim. Installation records listing tank capacity, facility plans showing tank location or purpose, or recent delivery receipts listing the contents of the tank are examples of possible documentation.

How do I register my tanks?

Complete form TCEQ-00659, available online at www.tceq.texas.gov/assets/public/permitting/rrr/forms/0659.pdf. All ASTs located at the same address must be included on the same registration form. If you own or operate tanks at different locations, you must file separate registration forms for each facility.

What if something changes?

You must submit a new AST form TCEQ-00659 to the agency within 30 days of any changes regarding an AST, such as:

- operational status
- condition
- substance stored
- ownership
- location of records
- number of tanks at the facility
- any change in contact information

What if I want to install a new or replacement AST?

If you install a new AST or replace an existing AST:

- At least 30 days before you begin work, submit a construction notification form (TCEQ-00495) to the applicable TCEQ regional office. TCEQ-00495 is available at www.tceq.texas.gov/assets/public/permitting/rrr/forms/0495.pdf.
- Between 24 and 72 hours before work begins, contact the appropriate TCEQ office for the region where the activity is to occur to report the time you will begin installation.

To determine which regional office you should notify, please visit www.tceq.texas.gov/assets/public/comm_exec/pubs/gi/gi-002.pdf.

What records do I need to keep?

You must comply with the same general recordkeeping requirements as USTs and legible copies of all original and amended tank registration documents must be kept for the operational life of the AST system. You should keep copies of all records that document compliance with applicable rules. These include, but are not limited to:

- your construction notification;
- application for approval of any proposed AST in the Edwards Aquifer recharge or transition zones;
- registration form;
- tank-manufacturing information;
- receipts of payments; and
- reports, plans, and certifications related to actions taken in response to suspected and confirmed releases.

Do I need a registration certificate?

Yes, you must have your (1) temporary delivery authorization or (2) registration certificate to receive fuel deliveries. For new and replacement tanks:

Temporary Delivery Authorization

- The TCEQ will send you a temporary delivery authorization, upon receipt of your construction notification form (TCEQ-00495).
- Attach the bill of lading for the first fuel delivery to your temporary authorization.
- The temporary delivery authorization expires 90 days after your first delivery.

Registration Certificate

- Submit a registration form (TCEQ-0659) within 30 days of your first fuel delivery.
- The TCEQ will send your registration certificate upon receipt of your registration form.

After the initial 90-day grace period, a common carrier must observe your valid registration certificate to deliver fuel.

What about skid tanks?

Skid tanks must be registered and labeled with the TCEQ-designated ID number. To register your tank:

- Complete a new registration form (TCEQ-00495) each time the tank is moved to a different location or register the tanks at a primary business location.
- Continuously maintain accurate records of the location, status, and type of petroleum product stored to demonstrate compliance at the facility where the tank is registered.

What if my tank leaks?

You must report a suspected or confirmed release to the TCEQ in the following cases:

- A spill or overfill that results in a release to the environment that exceeds 25 gallons or that causes a sheen on nearby surface water.
- A spill or overfill of less than 25 gallons, if the cleanup cannot be accomplished within 24 hours.

Please refer to *Suspected and Confirmed Releases from Petroleum Storage Tanks* (TCEQ publication RG-475h) for more information on this subject.

Do I need financial assurance?

Financial assurance is not required for AST systems.

Do I need operator training?

Operator training is not required for AST systems.

Where to find more information?

State requirements for ASTs appear in 30 TAC 334, Subchapter A available at [texreg.sos.state.tx.us/public/readtac\\$ext.ViewTAC?tac_view=5&ti=30&pt=1&ch=334&sch=A&rl=Y](http://texreg.sos.state.tx.us/public/readtac$ext.ViewTAC?tac_view=5&ti=30&pt=1&ch=334&sch=A&rl=Y), and 30 TAC 334, Subchapter F available at [texreg.sos.state.tx.us/public/readtac\\$ext.ViewTAC?tac_view=5&ti=30&pt=1&ch=334&sch=F&rl=Y](http://texreg.sos.state.tx.us/public/readtac$ext.ViewTAC?tac_view=5&ti=30&pt=1&ch=334&sch=F&rl=Y).

Requirements for tanks in the Edwards Aquifer are in 30 TAC 213 available at [texreg.sos.state.tx.us/public/readtac\\$ext.ViewTAC?tac_view=4&ti=30&pt=1&ch=213](http://texreg.sos.state.tx.us/public/readtac$ext.ViewTAC?tac_view=4&ti=30&pt=1&ch=213).

Requirements for tanks over other aquifers are in 30 TAC 214 available at [texreg.sos.state.tx.us/public/readtac\\$ext.ViewTAC?tac_view=4&ti=30&pt=1&ch=214&rl=Y](http://texreg.sos.state.tx.us/public/readtac$ext.ViewTAC?tac_view=4&ti=30&pt=1&ch=214&rl=Y).

TCEQ Guidance on PST regulations is available at www.tceq.texas.gov/remediation/pst_rp/downloads.html.

U.S. Environmental Protection Agency requirements, including Spill Prevention, Control, and Countermeasures (SPCC) are in Title 40, Code of Federal Regulations, Part 112 available at www.ecfr.gov/cgi-bin/text-idx?SID=8ae74a76e3fbf28c91f3358109250f55&mc=true&node=pt40.24.112&rgn=div5.

Download forms from the TCEQ's website at www.tceq.texas.gov/search_forms.html

Download publications at the TCEQ's website at www.tceq.texas.gov/publications

For information on cleanup requirements, you may contact the Remediation Division at 512-239-2200.

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



TCEQ REGULATORY GUIDANCE

Program Support and Environmental Assistance Division
RG-475o • August 2019

Training for Underground Storage Tank Operators

A guide for owners and operators of USTs

This is a general guide to laws and regulations for underground storage tanks and an aid in minimizing potential risks; it does not replace those laws and regulations, which take precedence over any information in this publication. If your UST 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). In addition to the laws and TCEQ rules, 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 laws and regulations.

Who must be trained?

As required by federal legislation, the TCEQ has adopted regulations requiring classes of operators of UST systems to be trained in performing compliance functions at their facilities. Owners and operators of regulated UST systems must comply with the operator training requirements listed in 30 TAC 334.601–606.

Each facility must have at least one named individual certified for each class of operator—classes A, B, and C. One person may hold more than one operator classification. During hours of operation, at least one certified operator must be present at the facility at all times.

At unmanned facilities where, during the normal course of business, no attendant is routinely present, a weather-resistant sign must be posted and clearly visible from any dispenser. The sign should include the following:

- basic safety procedures,
- a 24-hour contact number monitored by a Class A, B, or C operator for the facility, and
- instructions on when to call 911.

What are the three classes of operators, and how do they differ?

A **Class A operator** has the primary responsibility of ensuring the proper operation and maintenance of a UST system. Class A operators must also know the regulations that apply to UST systems, including an understanding of:

- registration
- system components
- product compatibility
- spill and overfill prevention and control
- corrosion protection
- release detection
- record keeping
- notification
- release reporting and response
- temporary and permanent closure
- operator training
- financial responsibility

This role is typically filled by the facility owner, or by a manager who acts in the capacity of managing resources and personnel.

A **Class B operator** has the primary responsibility of implementing all applicable requirements of these regulations in the field, including day-to-day aspects of the operation and maintenance of the UST system. These responsibilities include a detailed knowledge of all the components listed above for a Class A operator. Additionally, the designated Class B operator for a facility must ensure that all Class C operators at that facility receive the required training.

This role is typically filled by the facility manager, or a person with UST site-specific technical expertise.

A **Class C operator** of a UST system must be trained in both general and facility-specific emergency-response procedures. This knowledge must include an understanding of:

- the operation of the emergency shutoff equipment;
- the initial response procedures following system alarm warnings;
- the first-response actions to releases, spills, or overfills; and
- how to notify emergency responders and the designated Class A and Class B operators of the UST system.

Class A and Class B operators are responsible for maintaining the emergency procedures on-site for easy access by Class C operators.

This role is typically filled by the facility clerks.

What type of training is required?

Class A and B operators must complete a TCEQ-approved operator training course or process, which **may** include classroom or online training performed by, contracted for, or approved by the TCEQ, and **must** include an evaluation of operator knowledge through testing, practical demonstration, or other TCEQ-accepted measures. All training providers must verify the training via a written or electronic certificate stating the classification and date. Every certificate must be maintained at the UST facility, and a copy submitted to the TCEQ at annual self-certification.

Class C operator training programs must meet the minimum requirements of the TCEQ rule. Their format can be in-class, hands-on, online, or any other format deemed acceptable by the Class B operator. A Class B operator must give the owner or operator of the UST facility a document—after signing, dating, and verifying it—that lists all trained Class C operators for the facility. The list must include the dates of their training and be kept current with any personnel changes.

When is the training deadline and how often must operators take courses?

Class A and Class B operators designated after Aug. 8, 2012, must have passed an acceptable operator training course before assuming operation and maintenance responsibilities for the UST system. Class C operators designated after Aug. 8, 2012, must have passed an acceptable operator training course before assuming unsupervised responsibilities for responding to emergencies at the facility.

All Class A, Class B, and Class C operators must be retrained within three years of their last training date. **Additionally, regardless of current operator license expiration date, certified A/B operators must be retrained no later than January 1, 2020, on new course material approved after April 1, 2018 by the TCEQ.** An individual may be designated as a Class A operator for one or more facilities. An individual may be designated as a Class B operator for up to 50 facilities. Class C operator training is only applicable at the specific facility for which the training was provided.

Training deadlines

Class A	Every 3 years*	TCEQ-approved training
Class B	Every 3 years*+	TCEQ-approved training
Class C	Every 3 years	Training approved or given by Class B operator

* Class A and Class B operators must be retrained no later than January 1, 2020, on new course material approved after April 1, 2018, by the TCEQ.

+If the TCEQ determines that the facility is in significant noncompliance, the Class B operator must retake the TCEQ-approved compliance class that addresses the noted noncompliance areas within a time frame set by the agency. Significant noncompliance includes the failure to provide release detection, spill and overfill prevention and control, corrosion protection, or financial assurance.

How can I find the required training courses?

To find an approved training provider, please see the list at www.tceq.texas.gov/goto/ust-training.

What records do I need to keep?

Owners and operators of UST facilities (except unmanned facilities) must maintain required operator training certificates on-site. Documentation may be maintained off-site electronically, if the facility can produce a clear, printed copy to the TCEQ within 72 hours of an investigation. Owners and operators of unmanned facilities must supply documentation as requested by a TCEQ (or authorized) investigator.

Where can I find more information?

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

For more information about the UST operator training rules, you may also contact the TCEQ's Remediation Division—PST Section at 512-239-2200, or e-mail psttech@tceq.texas.gov.

