PST Super Guide

A Comprehensive Guide to Compliance in Texas
PST Super Guide

A Comprehensive Guide to Compliance in Texas

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

T E X A S C O M M I S S I O N O N E N V I R O N M E N T A L Q U A L I T Y

RG-475 (revised 8/17)
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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](http://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](http://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. Although the TCEQ continues to hold a responsible party liable for a cleanup even after property is sold (i.e., the person in charge of the property when the release occurred may not contract away required cleanup once a release has been discovered), buyers are cautioned that they may also become responsible for performing corrective action on their property.

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

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?


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

Requirements for tanks in the Edwards Aquifer are in 30 TAC 213 available at

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


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

- 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 requirements?

For all UST system installations commencing on or after February 1, 1990, you shall assure that a contractor licensed by the agency conducts the UST system installation. 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 to become familiar with terminology and options.

Specific standards for equipment and installation procedures may be found in 30 TAC 334 and, in some instances, 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. Many times 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 overfill prevention equipment, release detection, and have striker plates under all fill and gauge openings.

New tanks, tank compartments, and piping must also meet specific standards for structural integrity and protection from corrosion. For example, a steel tank must have a fiberglass or polyurethane coating, bond, or jacket that meets specific standards. Tanks may be constructed of coated and cathodically protected steel; steel with an external factory-applied, fiberglass-reinforced plastic; steel with a polyurethane cladding or jacket; or fiberglass-reinforced plastic.

Piping may be constructed of fiberglass-reinforced plastic, coated and cathodically protected steel, or flexible non-metallic material. Flexible connectors must be installed at both ends of a pressurized piping system unless the piping is inherently flexible. For pressurized piping systems, shear or emergency-shutoff valves must be properly installed and anchored. Tanks, piping, and shear valves must be constructed per the technical standards for new UST systems in 30 TAC 334.46.

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

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

To prevent flotation of the tanks, an anchoring system is required for all USTs located in areas subject to high water tables or flooding. The Federal Emergency Management Agency’s website allows you to search detailed flood maps at <www.msc.fema.gov/portal/search>. The anchoring system must meet the tank manufacturer’s specifications and applicable TCEQ requirements in 30 TAC 334.46(b).

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

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).

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. Factors to consider when installing a UST system include:

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

For UST systems installed after Jan. 1, 2009

You must install secondary containment for new and replacement tanks and for new piping. Any piping replacement that affects less than 35 percent 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 (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;
- 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.

You must properly dispose of any liquid detected by alarms or any liquids or debris found during an inspection within 96 hours of discovery. You must use an authorized facility to transport and dispose of any liquid or debris removed.

For assistance and/or to discuss proper disposal of waste, please call SBLGA's hotline at 800-447-2827.

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

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>.

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>.

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


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).

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- 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>.

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.** 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 and related testing of the tank or its associated piping; 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 two years of experience and is registered with the 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 the 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 work the license holders can perform.

<table>
<thead>
<tr>
<th>UST Contractor License</th>
<th>On-Site Supervisor Class A</th>
<th>On-Site Supervisor Class B</th>
<th>On-Site Supervisor Class A/B Combination</th>
<th>Corrosion Specialist</th>
<th>Corrosion Technician</th>
</tr>
</thead>
<tbody>
<tr>
<td>UST Installation</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Repair (upgrades and replacements)</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Removal</td>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td>X</td>
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<tr>
<td>Design of corrosion protection system</td>
<td></td>
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<td></td>
<td>X</td>
</tr>
<tr>
<td>Corrosion testing</td>
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<td>X</td>
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<tr>
<td>Pressure testing</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>(during installation and repair)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Secondary containment</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Installation or replacement of vent lines</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
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<tr>
<td>Installation or replacement of submersible pumps</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Installation of equipment to test tightness of tank or piping</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Installing permanent release detection and monitoring equipment</td>
<td>X</td>
<td></td>
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<td></td>
<td>X</td>
</tr>
</tbody>
</table>
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; or
- work on a system that is not regulated under 30 TAC 334.

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/readtacSext.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/readtacSExt.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/agency/pst_cert.html].


Requirements for tanks over other aquifers are in 30 TAC 214 available at [texreg.sos.state.tx.us/public/readtacSExt.ViewTAC?tac_view=4&ti=30&pt=1&ch=214&rl=Y].

Instructions for how to find licensed UST contractors are available at [www.tceq.texas.gov/remediation/pst_rp/license_ust.html].
Our Field Citation Program webpage at <www.tceq.texas.gov/goto/field_citation> was initiated to promote a quick resolution for any of the field citation-eligible violations documented during a TCEQ investigation, while offering a reduced penalty.


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 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.

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.

What are UST registration and self-certification? How do I self-certify or register my tanks?

Registration is how you inform the TCEQ about your UST systems. Self-certification is how you notify the TCEQ that your motor-fuel UST system complies with certain technical and administrative requirements, and is necessary for the owner-operator to obtain a fuel-delivery certificate. Motor fuel is defined as “A petroleum substance which is typically used for the operation of internal combustion engines (including stationary engines and engines used in motor vehicles, aircraft, and marine vessels), and which is one of the following types of fuels: motor gasoline, aviation gasoline, Number 1 diesel fuel, Number 2 diesel fuel, biodiesel blended with Number 1 or Number 2 diesel, gasohol, or other alcohol blended fuels.” Both registration and self-certification entail the submission of core data to the TCEQ Central
Registries, and both 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. The owner or operator must certify that the UST system is in compliance with technical standards and requirements for registration, financial assurance, and operator training. The owner or operator must also certify that all fees due to the TCEQ have been paid in full (i.e., annual fees plus all late fees, penalties, and 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 initial or renewed operator-training certificate with the annual self-certification. For additional information on operator training, please see module RG-475o. Once the form is processed, the TCEQ will issue your certificate authorizing delivery of fuel. Receiving fuel without a current, valid fuel-delivery certificate is a violation of TCEQ rules and may result in fines and penalties.

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, allowing 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.

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.

Core data for the Central Registry are reported on the first two sheets of the UST form. If you have any questions related to the first two pages of the form, please call TCEQ Central Registry at 512-239-5175.

When do I need to submit form TCEQ-00724?

You must submit this form annually or when a UST is installed or temporarily or permanently removed 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 technical data or changes in financial assurance). 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, the 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 before the current certificate expires. 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 30 days following the change in responsibility for the system. It is essential that the new owner or operator submit a new self-certification form 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.

<table>
<thead>
<tr>
<th>If the owner number ends in</th>
<th>Certificate expires</th>
<th>Renewal date</th>
<th>You must post your new delivery certificate on</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Jan 31</td>
<td>Jan 2</td>
<td>Feb 1</td>
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<tr>
<td>2</td>
<td>last day of Feb</td>
<td>Jan 30</td>
<td>Mar 1</td>
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<td>(in leap year, Jan 31)</td>
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<tr>
<td>3</td>
<td>Mar 31</td>
<td>Mar 2</td>
<td>Apr 1</td>
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<tr>
<td>4</td>
<td>Apr 30</td>
<td>Apr 1</td>
<td>May 1</td>
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<td>5</td>
<td>May 31</td>
<td>May 2</td>
<td>Jun 1</td>
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<td>Sep 1</td>
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<td>0</td>
<td>Oct 31</td>
<td>Oct 2</td>
<td>Nov 1</td>
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</table>

**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 the 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 at 30 TAC 37, Subchapter I. For additional information on financial assurance, please see module RG-475i.

Where do I find more information?

The complete requirements for registration and self-certification appear at 30 TAC 334.7, 334.8 <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.

Preventing Petroleum Storage Tank Spills and Overfills

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 located in 30 TAC 334.51 list the equipment required as well as defining proper fill procedures, maintenance, and record keeping.

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

Spill and overfill prevention 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 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 water 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:
  1. automatic shutoff
  2. automatic flow restrictor
  3. 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 out of spill buckets—some can collect enough water and sediment, along with spilled product, to make draining this mixture into the tank unwise. If that happens, pump out the spill bucket and dispose of the liquid properly. If the liquid contains fuel or chemicals, it could be considered a hazardous waste.

![Figure 1. Spill bucket.](image)

Manufacturers equip spill buckets with either pumps or drains to remove liquid. See Figure 2.
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.
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, 6), the most common flow restrictor, is usually installed in the vent line or in a separate, dedicated portal.

![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.](image)

![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.](image)

Can I use an audible alarm as an overfill device?

An **audible alarm** 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 containers?

All spill containers, regardless of their date of installation, need to be inspected to ensure they are liquid tight at least once every 60 days. The owner or operator should make sure that the spill container's sides and bottoms and any penetration points are liquid tight. Remove and properly dispose of any liquids or debris found during the inspection within 96 hours of discovery. 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.

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, including 60-day inspection records for spill containers. Keep installation records for the UST system, including documentation of your 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 334.51.


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>.
Instructions

This form may be used to document compliance with the 60-day inspection requirement for spill containers. Inspect all spill containers to ensure that their sides, bottoms, and any penetration points are liquid tight. Remove and properly dispose of any liquids or debris found during the inspection within 96 hours of discovery. Keep this form on file for at least 5 years.

Inspection Log for Spill Container

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<th>Date Inspected</th>
<th>Result</th>
<th>Inspector Initials</th>
<th>Comments, including date emptied</th>
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<td>Inspector Initials</td>
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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 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 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 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 also must 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 and 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 keeping them free from contact with water and soil.

3. **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. An example might be jacketed steel tanks.

4. **Cathodic Protection.** Discussed below, is an option for protecting a UST system from corrosion.

5. **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: sacrificial 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?

Generally, you need to keep records to document that you are operating your UST system in compliance with applicable rules, including all:

- Installation documentation relating to corrosion protection, including information from the manufacturer of the tank and piping and about the cathodic protection system. Keep installation records for the life of the UST system.
- Rectifier readings and test records. A sample blank log, titled 60-Day Record of Impressed Current Cathodic Protection, is provided at the end of module f. Keep all test records and log readings for at least five years.

Where do I find more information?


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>.

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 hot line 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 hot line, 800-447-2827, or online at <www.sblga.info>.

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

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<tr>
<th>Important System Information</th>
<th>Your Data</th>
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</thead>
<tbody>
<tr>
<td>Rectifier Manufacturer:</td>
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<tr>
<td>Rated DC Output (<em>record volts and amps</em>):</td>
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</tr>
<tr>
<td>Rectifier Model:</td>
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<tr>
<td>Rectifier Serial Number:</td>
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<tr>
<td>What is the “as designed” or most recent recommended rectifier output? (<em>record volts and amps</em>):</td>
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## Log of Rectifier Operation

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<th>Rectifier Turned On?</th>
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<th>Tap Setting (Fine)</th>
<th>DC Output (Volts)</th>
<th>DC Output (Amps)</th>
<th>Hour Meter</th>
<th>Inspector Initials</th>
<th>Comments</th>
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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 monthly release detection method. “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 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)

An electronic Non-Blended Inventory Control Worksheet is 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 month, compare the book inventory (what your recordkeeping indicates you should have based on amount of product dispensed) against the measured inventory to determine that month’s 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. If the overage or shortage exceeds the “leak check” value for two consecutive months 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 a month. This required monthly 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 monthly 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 monthly method that is capable of detecting small leaks.

*What are my options for detecting releases from tanks?*

Monitor each tank for leaks at least once a month. When properly employed, the following are acceptable methods of monthly 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 a month, and keep the passing leak test results.

  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 a SIR vendor, who performs an analysis to determine if there is a loss trend in the UST system.

By the 15th of each month, 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 monthly 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 month. 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 month) 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 one month 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 month) 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 one month 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 month) 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.

- **Monthly 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 monthly tank gauging tracking sheet. If you would like more information on this method, contact the TCEQ using the information at the end of this guide.

### What are my options for detecting releases from product piping?

The two types of piping are 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
- monthly vapor monitoring
- monthly groundwater monitoring
- monthly interstitial monitoring
- monthly monitoring with a secondary containment barrier
- monthly SIR and inventory control
• monthly 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.
- 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
- monthly vapor monitoring
- monthly groundwater monitoring
- monthly interstitial monitoring
- monthly monitoring with a secondary containment barrier
- monthly 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:

- Monthly Record of Vapor-Well Monitoring
- Monthly Record of Groundwater-Well Monitoring
- Monthly Record of Interstitial-Sensor Monitoring
- Monthly Record of Secondary Containment Well Monitoring
- Weekly Record of Manual Tank Gauging (Tanks <1,000 gallons)
- Record of Monthly 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 within 24 hours as a suspected release to the agency at 512-239-2200 or 800-832-8224.

For more information on what to do in the case of suspected releases, please 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


Resources for PST facilities are available on our website at


Requirements for tanks in the Edwards Aquifer are in 30 TAC 213 available at


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


The 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/>.

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>.
Monthy 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>.

**Instructions**

- Vapor wells must be monitored at least monthly 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**

<table>
<thead>
<tr>
<th>Instrument Name and Type:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Date Last Calibrated:</td>
</tr>
<tr>
<td>Depth from Ground Surface to Tank Bottom (in feet):</td>
</tr>
</tbody>
</table>

**Vapor Monitoring Well Record**

<table>
<thead>
<tr>
<th>Date Inspected</th>
<th>Vapor Reading (in PPM)</th>
<th>Free Product in Well (Y/N)</th>
<th>Inspector Initials</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Well #1</td>
<td>Well #2</td>
<td>Well #3</td>
<td>Well #4</td>
</tr>
</tbody>
</table>
# Monthly 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](http://www.TexasEnviroHelp.org).

## Instructions
- Groundwater wells must be monitored at least monthly 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 method 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

<table>
<thead>
<tr>
<th>Groundwater- Monitoring Well</th>
<th>Depth from Ground Surface (in feet):</th>
<th>Depth to Tank Bottom (in feet):</th>
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<tbody>
<tr>
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## Facility Information

<table>
<thead>
<tr>
<th>Facility Name:</th>
<th>Facility ID No.:</th>
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<tr>
<th>Street Address:</th>
<th>City, State, Zip:</th>
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</table>

## Groundwater Monitoring Well

<table>
<thead>
<tr>
<th>Date Inspected</th>
<th>Depth to Top of the Groundwater (in feet)</th>
<th>Free Product in Well (Y/N)</th>
<th>Inspector Initials</th>
<th>Comments</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Well #1</td>
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<td>Well #2</td>
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<td>Well #3</td>
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<td>Well #4</td>
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<td>Well #5</td>
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<td>Well #6</td>
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</table>
Monthly 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**

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<th>Facility Name:</th>
<th>Facility ID No.:</th>
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<tr>
<th>Street Address:</th>
<th>City, State, Zip:</th>
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**Instructions**

- Interstitial sensors must be monitored at least monthly 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])**

<table>
<thead>
<tr>
<th>Sensor #1</th>
<th>Sensor #2</th>
<th>Sensor #3</th>
<th>Sensor #4</th>
<th>Sensor #5</th>
<th>Sensor #6</th>
<th>Sensor #7</th>
<th>Sensor #8</th>
</tr>
</thead>
</table>

**Sensor Status Record**

<table>
<thead>
<tr>
<th>Date Inspected</th>
<th>Sensor #1</th>
<th>Sensor #2</th>
<th>Sensor #3</th>
<th>Sensor #4</th>
<th>Sensor #5</th>
<th>Sensor #6</th>
<th>Sensor #7</th>
<th>Sensor #8</th>
<th>Inspector Initials</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
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</tbody>
</table>
### Monthly 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>.

**Instructions**
- Observation wells must be monitored at least monthly 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 if 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.

**Facility Information**

<table>
<thead>
<tr>
<th>Facility Information</th>
<th>Facility ID No.:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Facility Name:</td>
<td></td>
</tr>
<tr>
<td>Street Address:</td>
<td>City, State, Zip:</td>
</tr>
</tbody>
</table>

**Monitoring Method**

Secondary Containment Release Detection Method (circle one):

<table>
<thead>
<tr>
<th>Observation Wells</th>
<th>Electronic Sensors</th>
</tr>
</thead>
</table>

**Observation Well or Sensor-Status Record**

<table>
<thead>
<tr>
<th>Date Inspected</th>
<th>Sensor-Status or Well Observation (Free product detected? (Y/N))</th>
<th>Inspector Initials</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sensor/Well #1</td>
<td>Sensor/Well #2</td>
<td>Sensor/Well #3</td>
<td>Sensor/Well #4</td>
</tr>
<tr>
<td>Sensor/Well #2</td>
<td>Sensor/Well #3</td>
<td>Sensor/Well #4</td>
<td>Sensor/Well #5</td>
</tr>
<tr>
<td>Sensor/Well #3</td>
<td>Sensor/Well #4</td>
<td>Sensor/Well #5</td>
<td>Sensor/Well #6</td>
</tr>
<tr>
<td>Sensor/Well #4</td>
<td>Sensor/Well #5</td>
<td>Sensor/Well #6</td>
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<td>Sensor/Well #5</td>
<td>Sensor/Well #6</td>
<td>Sensor/Well #1</td>
<td>Sensor/Well #2</td>
</tr>
<tr>
<td>Sensor/Well #6</td>
<td>Sensor/Well #1</td>
<td>Sensor/Well #2</td>
<td>Sensor/Well #3</td>
</tr>
</tbody>
</table>
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>.

Instructions
- Manual Tank Gauging must be performed weekly.
- In the table to the side, circle your tank size, duration, and standard.
- If the weekly or monthly average of the four weekly test results exceed 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.

<table>
<thead>
<tr>
<th>Tank Size</th>
<th>Minimum Duration of the Test</th>
<th>Weekly Standard (1 test)</th>
<th>Monthly Standard (4-test average)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Up to 500 Gallons</td>
<td>36 hours</td>
<td>10 gallons</td>
<td>5 gallons</td>
</tr>
<tr>
<td>551-1000 gallons (when tank diameter is 64&quot;)</td>
<td>44 hours</td>
<td>9 gallons</td>
<td>4 gallons</td>
</tr>
<tr>
<td>551-1000 gallons (when tank diameter is 48&quot;)</td>
<td>58 hours</td>
<td>12 gallons</td>
<td>6 gallons</td>
</tr>
</tbody>
</table>

Facility Information

<table>
<thead>
<tr>
<th>Facility Name:</th>
<th>Facility ID No.:</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Street Address:</th>
<th>City, State, Zip:</th>
</tr>
</thead>
</table>
## Gauge Record

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Start Test</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(date and time)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>First Initial Stick Reading</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Second Initial Stick Reading</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Average Initial Reading</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Initial Gallons</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(convert inches to gallons)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>[a]</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>End Test</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(date and time)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>First End Stick Reading</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Second End Stick Reading</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Average End Reading</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>End Gallons</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(convert inches to gallons)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>[b]</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Change In Tank Volume</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(gallons + or -)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>[a-b]</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Initials</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Tank Passes Test? Y/N</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
1. In the Tank Gauging Details table, circle your Tank Size and Monthly Standard.

2. Each month in the Gauging Record table, record the dates and stick readings for the start and end tests. Your start time and end time must be at least 36 hours apart. If you don't have sufficient quiet time, you must choose a different method of release detection.

3. Calculate the change in tank volume, and if the change exceeds the standard in the table, your tank may be leaking. If there is a suspected release, notify TCEQ within 24 hours and see *Suspected and Confirmed Releases from PSTs* (TCEQ publication RG-475h).

4. Keep this form on file for at least 5 years.

Table 1. Tank Gauging Details

<table>
<thead>
<tr>
<th>Tank Size</th>
<th>Monthly Standard (4-test average)</th>
</tr>
</thead>
<tbody>
<tr>
<td>550 gallons or less</td>
<td>5 gallons</td>
</tr>
<tr>
<td>551-1,000 gallons</td>
<td>7 gallons</td>
</tr>
<tr>
<td>1,001-2,000 gallons</td>
<td>13 gallons</td>
</tr>
<tr>
<td>Greater than 2,000</td>
<td>1% of the total tank capacity gallons</td>
</tr>
</tbody>
</table>

Table 2. Gauging Record

<table>
<thead>
<tr>
<th>Start Test (date &amp; time)</th>
<th>First Initial Stick Reading</th>
<th>Second Initial Stick Reading</th>
<th>Average Initial Reading</th>
<th>Initial Gallons (convert avg inches to gallons) [a]</th>
<th>End Test (date &amp; time)</th>
<th>First End Stick Reading</th>
<th>Second End Stick Reading</th>
<th>Average End Reading</th>
<th>End Gallons (convert inches to gallons) [b]</th>
<th>Change in Tank Volume (gallons +/-) [a-b]</th>
<th>Initials</th>
<th>Tank Pass Test Y/N</th>
</tr>
</thead>
</table>
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 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 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 overfill 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 PST system 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 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.doc>. 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 a part of an installation, repair, or removal of a regulated UST.

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)

<table>
<thead>
<tr>
<th>Time Frame¹</th>
<th>Scenario or Description</th>
<th>Required Report or Form²</th>
</tr>
</thead>
<tbody>
<tr>
<td>Within 24 hours of suspecting a release</td>
<td>Report all suspected releases to the TCEQ (30 TAC 334.72).</td>
<td>PST Program Incident Report form (TCEQ-20097)</td>
</tr>
<tr>
<td>Within 30 days of suspecting a release</td>
<td>Conduct system test, site check, or other approved procedure to investigate and confirm suspected release (30 TAC 334.74).</td>
<td>N/A</td>
</tr>
<tr>
<td>Within 45 days of suspecting a release</td>
<td>Report investigation of a suspected release where ultimately, no release was found (30 TAC 334.74(3)).</td>
<td>PST Release Determination Report form (TCEQ-00621)</td>
</tr>
<tr>
<td>Within 24 hours of release confirmation</td>
<td>Report all confirmed releases to the TCEQ (30 TAC 334.76).</td>
<td>PST Program Incident Report form (TCEQ-20097)</td>
</tr>
<tr>
<td>Within 20 days of release confirmation</td>
<td>Report a confirmed release, whether above or below action levels (30 TAC 334.77(b)).</td>
<td>PST Release Determination Report form (TCEQ-00621)</td>
</tr>
<tr>
<td>Within 45 days of release confirmation</td>
<td>Conduct site assessment and submit report (30 TAC 334.78(c)).</td>
<td>Assessment Report Form (TCEQ-00562)</td>
</tr>
</tbody>
</table>

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.doc>. 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](http://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 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.doc>.

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 stop 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?


Resources for PST facilities are available on our website at <www.tceq.texas.gov/agency/pst_cert.html>.


Requirements for tanks over other aquifers are in 30 TAC 214 available at <texreg.sos.state.tx.us/public/readtacSext.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/publications/rg/rg-411.html>.


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. Screen navigates to a listing of licensed contractors within the locale you defined.

iv. 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.ii through 3.a.iv 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 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.

* In addition, this mechanism requires establishment of a separate, unfunded standby trust.
• 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 Stage I and II Vapor Recovery

A guide for owners and operators of underground storage tanks

This is a general guide to laws and regulations about underground and aboveground storage tanks and an aid in minimizing potential risks; it does not replace those laws and regulations, which take precedence over any information contained herein. If your tank system is located in Kinney, Uvalde, Medina, Bexar, Comal, Hays, Travis, or Williamson County, additional requirements related to the protection of the Edwards or the Trinity Aquifer may apply (Title 30, Texas Administrative Code [30 TAC], Chapters 213 and 214). 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 Stage I and II 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. Stage I and Stage II are two control strategies helping Texas achieve its goals for air quality.

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 gasoline dispensing facilities 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 record keeping, testing, and inspection requirements.

Stage II captures gasoline vapors when a vehicle is being fueled at a dispenser. The vapors are returned through the dispenser hose to the petroleum storage tank instead of being released into the air. On some vehicles, onboard canisters help
capture up to 95 percent of harmful gasoline vapors that might otherwise be released to the atmosphere. 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. Stage II equipment captures gasoline vapors during vehicle refueling and sends them back to the underground storage tank. 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.](image)

**Am I required to have Stage I?**

Applicability of the Stage I vapor recovery rules is determined by the county in which the gasoline dispensing facility 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 Web page Stage I Vapor Recovery at <www.tceq.texas.gov/goto/stageI>.

**Table 1.** Counties requiring Stage I.

<table>
<thead>
<tr>
<th>Affected Counties</th>
<th>Monthly Throughput</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brazoria, Chambers, Collin, Dallas, Denton, El Paso, Fort Bend, Galveston, Hardin, Harris, Jefferson, Liberty, Montgomery, Orange, Tarrant, Waller*</td>
<td>Any amount*</td>
</tr>
<tr>
<td>Ellis, Johnson, Kaufman, Parker, Rockwall</td>
<td>More than 10,000 gallons of gasoline in any month after April 30, 2005</td>
</tr>
<tr>
<td>Bastrop, Bexar, Caldwell, Comal, Guadalupe, Hays, Travis, Williamson, Wilson**</td>
<td>More than 25,000 gallons of gasoline in any month after December 31, 2004**</td>
</tr>
</tbody>
</table>

* If your gasoline dispensing 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 gasoline dispensing 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 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
  - monthly inventory records to show gasoline throughput

Also, your facility must 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 gasoline dispensing facilities (GDF) 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 systems?

All Stage II systems are required to be compatible with onboard refueling vapor recovery (ORVR). Additionally, all Stage II equipment must be certified by CARB or an approved third party. CARB executive orders delineate system-specific requirements for installation, equipment, and maintenance. Table 2 gives a list of common CARB executive orders. For a more complete list of Stage II ORVR-approved systems and CARB executive orders, follow the TCEQ Web address at the end of this module.

<table>
<thead>
<tr>
<th>System</th>
<th>Executive Order</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gilbarco</td>
<td>G-70-150 AE</td>
</tr>
<tr>
<td>Dresser-Wayne</td>
<td>G-70-153 AD</td>
</tr>
<tr>
<td>Tokheim</td>
<td>G-70-154</td>
</tr>
<tr>
<td>Balance</td>
<td>G-70-52 AM</td>
</tr>
<tr>
<td>Healy 800</td>
<td>G-70-191-AA</td>
</tr>
<tr>
<td>Healy 400 ORVR</td>
<td>G-70-186</td>
</tr>
</tbody>
</table>

What are the requirements for Stage II decommissioning?

Owners or operators of GDFs constructed on or after May 16, 2012, are no longer required to install Stage II equipment, and existing facilities may decommission Stage II equipment. Stage II equipment may be removed after May 16, 2014, provided that all other requirements for decommissioning have been met,
including appropriate notification. You 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 and a report with test results must be submitted to the appropriate TCEQ regional office. All decommissioning must be completed by August 31, 2018.

Owners and operators of GDFs that decide to keep their Stage II equipment may do so, but must continue to test, repair, replace, retrofit, and maintain the equipment in accordance with current requirements, described below.

What are the Stage II testing requirements?

If your facility has Stage II equipment, the following tests are required once every 12 months, within the same calendar month in which they were completed during the previous year:

- TXP-102 Pressure Decay
- TXP-104 Flow Rate (if applicable)
- TXP-105 Liquid Removal (if applicable)
- TXP-106 Volume-to-Liquid Ratio (vacuum assist)

Additionally, the following tests are required once every 36 months:

- TXP-101 Vapor Space Manifolding
- TXP-103 Dynamic Back-Pressure

You must submit a Pre-Test Notification Form (TCEQ-10501) to your TCEQ regional office at least 10 days before you conduct any type of testing on your Stage II equipment. This form can be downloaded at <www.tceq.texas.gov/search_forms>. Regional office mailing addresses appear on page 2 of the form.

All test results, regardless of their outcome, must be submitted to the appropriate regional office within 10 working days after the test is conducted. Attach to the completed Vapor Recovery Test Result Cover Sheet (form TCEQ-10502) copies of all result forms from each applicable test. For more information about Stage II vapor recovery testing, please refer to the Vapor Recovery Test Procedures Handbook (TCEQ publication no. RG-399).

What are the Stage II inspection requirements?

If your facility is equipped with Stage II equipment, you must inspect for the following defects daily:

- any missing or disconnected equipment
- a crimped or flattened vapor hose
• a torn nozzle boot
• for balance nozzles, a damaged faceplate
• for vacuum-assist systems, a damaged or missing cone
• a nozzle shutoff mechanism that malfunctions in any manner
• a vapor processing or control unit that is inoperative or defective
• a system monitor or printer that is malfunctioning or out of paper
• a gasoline leak in either the dispensing or Stage II equipment

Monthly, the owner or operator must inspect for inoperative or defective pressure-vacuum relief valves, vapor check valves, or Stage I dry breaks. Keep a separate daily and monthly inspection sheet, and document every inspection. If you discover any defect, you must remove all affected dispensing equipment from service until the defect has been properly repaired, replaced, or adjusted. For more specific information on Stage II inspection requirements, refer to the rules in 30 TAC 115.242.

**What are the Stage II training requirements?**

Facilities equipped with a Stage II vapor recovery system are required to have at least one worker at that station trained and certified to operate and maintain the system. To obtain this certification for yourself or one of your employees, you must register for a course from a TCEQ-approved training provider.

If you own or operate more than one facility, you may send at least one employee from each facility to a “representative” course, or you may send one employee to a “trainer” course. An employee who has taken a “trainer” course is allowed to train the employees from other facilities. The TCEQ Web site maintains a list of training providers (see the Web address at the end of this guide).

The certified individual is responsible for making all current and future employees familiar with the purposes and correct operating procedures of your Stage II system. If the facility representative who received the approved training is no longer employed at that facility, another representative must successfully complete approved training within three months of the departure of the previously trained employee.

**What records do I need to keep?**

For facilities with Stage II equipment, you must keep the following records onsite for at least two years:

• a record of any maintenance conducted on any part of the Stage II equipment, including—
  • a general description of the part serviced or replaced
Gasoline Stage I and II Vapor Recovery

- the date and time the equipment was taken out of service
- the date of any repair or replacement
- information on the manufacturer of any replacement part
- a general description of the location of any repaired or replacement part in the system (for example, the dispenser number, etc.)
- a description of the problem

- the results of any additional testing conducted at your facility

Additionally, you must keep the following records on site indefinitely:

- a copy of the CARB executive order or third-party certification for the Stage II system
- a copy of any owner or operator request for executive director approval of alternate methods and any ED approval issued
- a record of the results of the daily, monthly, and yearly self-inspections at the fuel dispensing facility

Also, the facility should maintain proof of attendance and completion of Stage II training for each employee as long as that employee continues to work at the facility.

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: <texreg.sos.state.tx.us>

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

Training for Stage II vapor recovery: <www.tceq.state.tx.us/goto/stage_ii_training>


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: <www.tceq.state.tx.us/publications>

For information about installation or renovation of Stage I or 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 the hotline at 800-447-2827 or online at <www.TexasEnvirohelp.org>.
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

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 General Land Office (Oil Spill Division)

The GLO has jurisdiction over any AST or UST that could cause spills that could reach coastal waters.
Who Regulates Petroleum Storage Tanks?  TCEQ publication RG-475k

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://fmx.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: <https://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 its design and placement meets 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," 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 overfill 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 Overfill 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

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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 costly remediation and cleanup fees. To minimize your risk, when your operations no longer require the service of a UST you should permanently remove it. Additionally, tank systems that do not meet applicable technical standards, as described in Chapter 334, Subchapter C, may need to be repaired, upgraded, or permanently removed 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. Each option has benefits and disadvantages over the other options.

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 the other options. A lender or a potential buyer may require additional sampling to ensure that there is no soil contamination. 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 contaminating the new stored substance is difficult and may be impractical.

In addition to the benefits and disadvantages of each option, the cost 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.

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Remove Tank from Ground</th>
<th>Permanently Fill Tank</th>
<th>Change in Service</th>
</tr>
</thead>
<tbody>
<tr>
<td>Notify TCEQ 30 days prior to removal (submit Form TCEQ-00495)</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Notify (and, if necessary, get approval from) local government and fire marshal</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Notify TCEQ regional office 24 to 72 hours before removal</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Empty UST of all regulated substance and accumulated sludge, and purge vapors</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Collect samples and assess site to determine if any substances released (submit Form TCEQ-00621)</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Empty; disconnect; and plug, cap, or remove tank, piping, and ancillary equipment</td>
<td>X</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Remove UST from site within 24 hours</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>During temporary storage, ensure no ignition sources are present and prevent unauthorized personnel access</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Do not store materials for human consumption in the tank</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Mark on the tank <em>flammable, unusable for storage of materials for human consumption, and list its prior contents in lettering at least 2 inches high</em></td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fill tank with inert material</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Notify owners of abandoned tank</td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Update UST registration form (submit Form TCEQ-00724)</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Maintain records of removal</td>
<td>X</td>
<td>X</td>
<td>X</td>
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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 as long as any UST remains at the facility, or 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
- for any UST removed from the ground, the methods used to handle, transport, store, and dispose of the tank

How can I find a licensed UST contractor and supervisor in my local area?

The TCEQ administers licenses for UST contractors and supervisors. You can find a UST contractor or supervisor in your local area at the TCEQ website: <www.tceq.texas.gov/goto/ust_remover>. For additional information, see Licensed Underground Storage Tank Contractors (TCEQ publication RG-475c).

For the site assessment, how many samples must be collected and where should I sample?

The sampling methods, types, location, and number of samples depend on your site. To ensure that any release of a regulated substance is detected and quantified, you must consider the following when designing your sampling plan:

- how your UST is being removed from service
- characteristics of the 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

For additional information on collecting samples, see Investigating and Reporting Releases from Petroleum Storage Tanks (RG-411). Note: financial assurance must be maintained 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 from service of a UST can be found at 30 TAC 334.55.

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>.
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 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.

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 ATSs are excluded from regulation:

- any tank with a capacity of 1,100 gallons or less;
- 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 registration. These include:

- a farm or residential tank with a capacity of 1,100 gallons or less used for noncommercial 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/about/directory/region/reglist.html>.

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?


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>.

TCEQ Guidance on PST regulations is available at <www.tceq.texas.gov/agency/pst_cert.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>. 
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 owners and 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 334.601–06.

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
- instruction 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
- 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 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. Also, 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 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 measures the TCEQ accepts. 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 must 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. 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

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<th>Class</th>
<th>Frequency</th>
<th>Requirements</th>
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<tbody>
<tr>
<td>Class A</td>
<td>Every 3 yrs</td>
<td>TCEQ-approved training</td>
</tr>
<tr>
<td>Class B</td>
<td>Every 3 yrs*</td>
<td>TCEQ-approved training</td>
</tr>
<tr>
<td>Class C</td>
<td>Every 3 yrs</td>
<td>Training approved or given by Class B operator</td>
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*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 the agency sets. Significant noncompliance includes the failure to provide release detection, spill and overfill prevention, 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>.