

What you need to know about Texas Commission on Environmental Quality (TCEQ)

Notice of disclaimer:

This document "A Guide for the New Tank Owner" is meant for informational purposes only in plain simple language for the new tank owner that may be useful. Petroleum Solutions, Inc. is in no way held responsible for the contents of this document.

The TCEQ is the state regulatory agency in Texas for underground storage tank (UST) and aboveground storage tank (AST) systems. It is important to know that the TCEQ will be inspecting all registered **UST** facilities between October 2007 and October 2010. Penalties for not being in compliance with TCEQ regulations can be substantial.

Note: If you have any questions as to whether or not you are currently in compliance with TCEQ regulations, please call Bill Morris at our McAllen office at 1-800-880-9582.

Note: This document will mainly focus on UST systems, as they are much more comprehensive than rules for ASTs.

Where to find the current TCEQ rules and regulation for USTs & ASTs

The rules & regulations relating to UST systems and AST systems can be found in the TCEQ main website page under "Rules, Policy and Legislation" The web site address is:

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

To download the appropriate rules for USTs and ASTs, go to "Chapter 334". Most of the rules in "Chapter 334" that would be of interest to the new tank owner are found in:

- Subchapter A (General Provisions)
- Subchapter B (Tank Fees)
- Subchapter C (Technical Standards)
- Subchapter D (Release Reporting)
- Subchapter F (Aboveground Storage Tanks)

Where do I find information from the TCEQ about areas that require Stage I & II vapor recovery?

This CD does not cover these regulations, but if you have a UST system in an area that requires Stage I, or Stage I & II vapor recovery, go to the website link below:

http://www.tceq.state.tx.us/implementation/air/vaporrecovery/vapor_recovery.html

What about old steel tanks?

Many of the older UST systems, particularly the ones with steel tanks, have been removed from the ground. As of December 22, 1998, the TCEQ rules required anyone with steel tanks and/or lines would have to have corrosion protection installed (if the UST

system was found to still be tight) or be permanently removed from the ground within 60 days.



Old steel tank being removed



Some of these old steel tanks may have caused a leak as shown by the hole in the tank above because of corrosion over time.

For the new tank owner whether it is a brand new system or you have purchased or considering purchasing an existing location with USTs, there are some basic things you need to know:

Considerations for purchasing an existing location with a UST system

Before buying that location (assuming that the UST system is to be used) find out everything you can about the previous operation. Ask for documentation about installation of the UST system, were there any repairs made or leaks in the past? Is this a profitable location and why is it being sold?

If this still looks like a good investment, before you put any money down, it is recommended to get with an environmental consultant to have a phase I and phase II site assessment done. The phase II site assessment includes taking soil borings and collecting soil samples in appropriate locations to determine as best as possible if there have been any previous releases or even one that the current owner may not even be aware of. It's like buying a used car, it may look good on the outside, but you should take it to a qualified mechanic to make sure it is in good running condition.

If you need help on locating an environmental consultant or advice on what to look for before you buy the location, please contact the closest Petroleum Solutions, Inc. office to you.

What are some of the requirements for UST systems for tank owners?

Registration:

If you have just bought the location with a UST system for fueling vehicles, the "TCEQ Underground Storage Tank & Self-Certification Form" will need to be submitted within 30 days to the TCEQ to show change of ownership. Most important, make sure all the information relating to the UST system is correct and you have documentation to back it up, such as the type of UST installed, piping, etc. You can check the TCEQ web site, PST Registration Database to see what is on record for the facility at:

http://www.tceq.state.tx.us/permitting/registration/pst/pst_query.html

Where can I obtain the "TCEQ Underground Storage Tank & Self-Certification Form"

This form can be filled out and downloaded from the TCEQ web site listed below as well as other useful information for tank owners.

http://www.tceq.state.tx.us/permitting/registration/pst/self_certifying_compliance.html#register

What about the TCEQ delivery certificate and what is it?

In order to get fuel from a fuel supplier, you must have a TCEQ delivery certificate. This delivery certificate is issued by the TCEQ once they have received the TCEQ Underground Tank Registration & Self-Certification Form and if it has been filled out properly. For brand new installations, this is usually filed before the facility is started up. The delivery certificate also identifies to which tanks fuel can be delivered.

If an existing facility that has a current TCEQ delivery certificate, the existing delivery certificate is good for 30 days only after the date that ownership is changed to allow the new owner to register the tanks. To avoid delays in delivery of fuel, it is recommended that the TCEQ Underground Tank Registration & Self-Certification Form be submitted as soon as possible.

The TCEQ Underground Tank Registration & Self-Certification Form must be submitted each year in order to receive a new TCEQ delivery certificate.

Once the new owner has received the TCEQ delivery certificate (which is good for 1 year) it must be posted in a visible location so the driver who delivers the fuel can see that the owner has a current TCEQ delivery certificate. It is also recommended that the owner FAX a copy of the TCEQ delivery certificate to their fuel supplier.

Numbering of the tanks

The tanks must be numbered to match the TCEQ Underground Tank Registration & Self-Certification Form. A legible tag, label, or marking is permanently applied upon or affixed to either the top of the fill tube or to a non-removable point in the immediate area of the fill tube for each regulated UST at the facility.

Release detection for tanks

Since December 22, 1998, all tanks shall be monitored in a manner, which will detect a release at a frequency of at least once every month (not to exceed 35 days between each monitoring). The exception is for SIR, which allows a monthly analysis report no more than 15 calendar days following the last day of the calendar month for which the analysis is performed. Also, emergency generators have special rule for release detection.

Release detection testing methods for ATGs, piping and SIR need to be 3rd party certified to meet EPA protocol. Listed below is the web site showing which companies has been 3rd party certified.

http://www.nwglde.org/method_index.html

The most common methods used are:

- Automatic tank gauge (ATG) – This is an electronic devise that is capable measuring the fuel level, water level and provides for monthly monitoring of the tank at .2 gph to meet TCEQ requirements. They can be set up, depending on the model purchased, to run the .2 gph test weekly, daily or continuously (called continuous statistical leak detection or CSLD) There are several makers of ATG units, which must be 3rd party certified to meet EPA protocol.



- SIR – Statistical Inventory Reconciliation (SIR) is a method used where inventory control records are sent to a vendor (3rd party certified) for analysis. The report is sent to tank owner no later than 15 days following the end of the month.

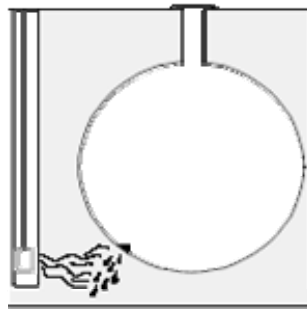
Statistical Inventory Reconciliation analyzes inventory, delivery, and dispensing data collected over a period of time to determine whether or not a tank system is leaking.

Each operating day, you measure the product level using a gauge stick or other tank level monitoring device. You also keep complete records of all withdrawals from the UST and all deliveries to the UST. After data has been collected for the month it is submitted to the vendor for analysis. The SIR vendor uses sophisticated computer software to conduct a statistical analysis of the data submitted to determine whether or not your UST may be leaking. The SIR vendor provides you with a test report of the analysis results by no later than the 15th of the following month. The information submitted can be done by fax, email or entering it directly on the database for the web site set up specially for your location.

Note: The test results are for the tank & lines.

- Vapor Monitoring – Vapor monitoring wells are usually installed around the tank area and pipe chase. Once a month, a technician measures for vapors from these wells to determine if a release has occurred and the report sent to the tank owner. Manually operated vapor monitoring systems range from equipment that immediately analyzes a gathered vapor sample to devices that gather a sample that must be sent to a laboratory for analysis. The results from vapor monitoring

systems must be monitored in a manner that will detect a release at a frequency of at least once every month (not to exceed 35 days between each monitoring).



Vapor monitoring well

- Interstitial Monitoring – For double-wall tanks, interstitial monitors are used to check the area between the inner and outer wall of the tank called the interstice. These monitors check for leaks and alert the operator if a leak is suspected. Some monitors indicate the physical presence of the leaked product, either liquid or gaseous. Other monitors check for a change in condition that indicates a hole in the tank, such as a loss of pressure or a change in the level of water between the walls of a double-walled tank.

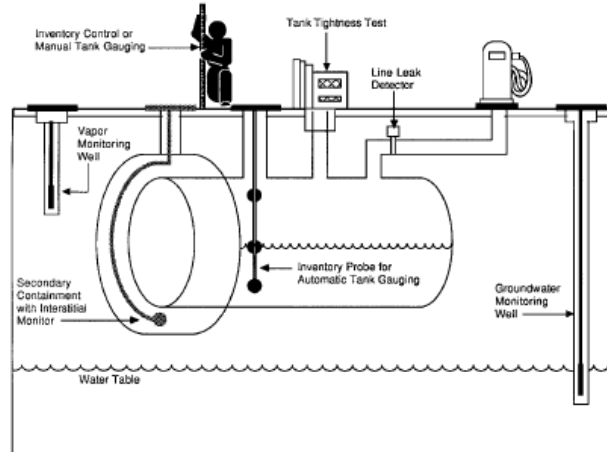
Monitors can be as simple as a dipstick used at the lowest point of the containment to see if liquid product has leaked and pooled there. Monitors can also be sophisticated automated systems that continuously check for leaks.

Note: As a tank owner, whichever method for release detection for tanks is used, the records documenting that the tank is tight needs to be kept for a minimum of 5 years.

For additional information, another good source is from the EPA at the below listed web site:

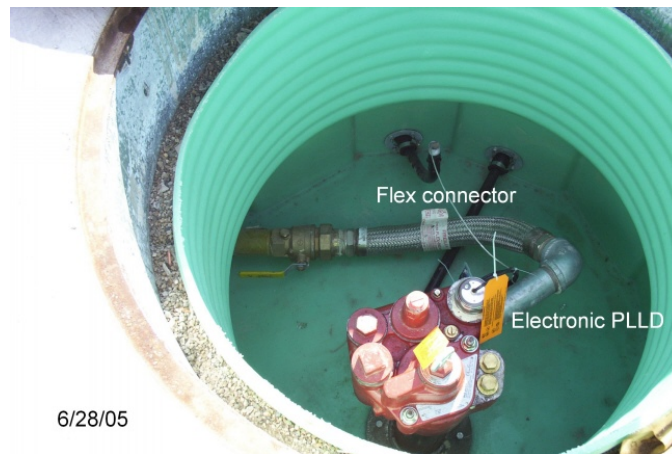
<http://www.epa.gov/OUST/pubs/stot05.pdf>

Shown below is a drawing of some of the typical methods for release detection methods for tanks and lines.



Release detection for piping for pressurized systems

If there is a pump in the tank that pumps fuel to the dispensers, it is a pressurized system. All pressurized lines need to have a line leak detector, either mechanical or electronic.



Showing an electronic line leak detector



Showing a mechanical line leak detector

What are the testing requirements for pressurized systems?

LINES

From the TCEQ rules relating to pressurized piping:

(I) The piping may be tested at least once per year by means of a piping tightness test conducted in accordance with a code or standard of practice developed by a nationally recognized association or independent testing laboratory. Any such piping tightness test shall be capable of detecting any release from the piping system of 0.1 gallons per hour when the piping pressure is at 150% of normal operating pressure.

(III) The piping may be monitored for releases at least once every month (not to exceed 35 days between each monitoring) by means of an electronic leak monitoring system capable of detecting any release from the piping system of 0.2 gallons per hour at normal operating pressure.

Note: If you have an electronic leak monitoring for the piping, be sure to **get a printout** from the ATG at least once a month to document the line(s) have passed the .2 gallons per hour test.

If you **do not** have an electronic leak monitoring for the piping, the piping needs to be tested once per year. Please contact Petroleum Solutions, Inc. to have this testing done. The test results are kept on a database at the main office in McAllen, so a call will be made once a year as a reminder that the annual testing is due.

Note: If you use SIR for the monthly release detection for the tanks, this also includes the lines. However, it is still recommended that the lines be tested as added assurance the lines are tight.

What are the TCEQ requirements for line leak detectors?

From the TCEQ rules relating to pressurized piping line leak detectors:

(A) Requirements for pressurized piping. UST system piping that conveys regulated substances under pressure shall be in compliance with the following requirements.

(i) Each separate pressurized line shall be equipped with an automatic line leak detector meeting the following requirements.

(II) The line leak detector shall be capable of alerting the UST system operator of any release within one hour of occurrence either by shutting off the flow of regulated substances, or by substantially restricting the flow of regulated substances.

(III) The line leak detector shall be tested at least once per year for performance and operational reliability and shall be properly calibrated and maintained, in accordance with the manufacturer's specifications and recommended procedures.

Note: With some makes of electronic line leak detectors, the manufacturers specifications do not require testing, however, it is recommended that the annual testing be done since in some occasions, the electronic system check can fail can not indicate a loss in pressure.

If you have a mechanical line leak detectors, these must be tested once a year. Please contact Petroleum Solutions, Inc. to have this testing done. The test results are kept on a database at the main office in McAllen, so a call will be made once a year as a reminder that the annual testing is due.

Note: It is also recommended that once a month that a visual check of the leak detector is made to be sure there are no minor leaks at the STP.



Why the STP should be checked periodically (full of fuel)

What are the requirements if using automatic tank gauge and inventory control for release detection for tanks?

From the TCEQ rules relating to automatic tank gauging and inventory control:

(4) Automatic tank gauging and inventory control.

(A) A combination of automatic tank gauging and inventory control may be used as a tank release detection method, subject to the following requirements.

(i) Inventory control procedures shall be in compliance with paragraph (1)(B) of this subsection.

(ii) The automatic tank gauging equipment shall be capable of:

(I) automatically monitoring the in-tank liquid levels, conducting automatic tests for substance loss, and collecting data for inventory control purposes; and

(II) performing an automatic test for substance loss that can detect a release of 0.2 gallon per hour from any portion of the tank which contains regulated substances.

Note: Inventory control will be discussed in another section of this document.

The automatic tank gauge monitor may look similar to the one below

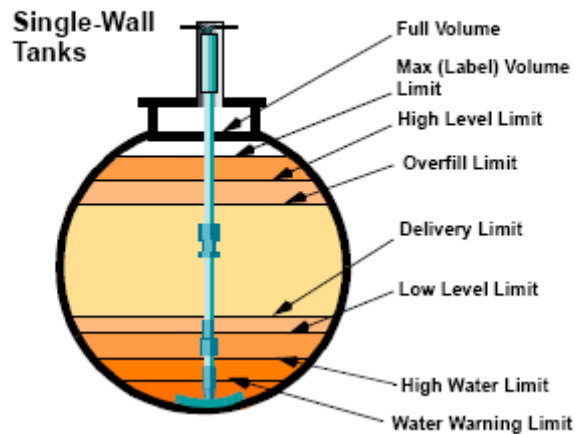




View of tank with STP and ATG probe

An electronic probe is installed in the tank that will measure the fuel levels to .01 inch and in gallons, temperature and water level in the tank. It will also provide the amount of empty space in the tank called ullage, useful to determine amount of fuel to order. Most important, it can do tank tightness test based on static level either on a programmed schedule, such as late at night when the store is closed and no fuel is sold, or continuous monitoring called CSLD. The ATG will also indicate a variety warning and alarms.

In-Tank Warning And Alarm Levels



The printout from the ATG for inventory may look like this:

```
JUN 20. 2007  2:49 PM  
  
-- SYSTEM STATUS RE:GR1  
T 3:LOW PRODUCT ALARM  
  
INVENTORY REPORT  
  
T 1:UNLEAD  
VOLUME      = 5586 GALS  
ULLAGE      = 4142 GALS  
90% ULLAGE  = 3169 GALS  
TC VOLUME   = 5490 GALS  
HEIGHT      = 51.16 INCHES  
WATER VOL   = 0 GALS  
WATER       = 0.00 INCHES  
TEMP        = 84.6 DEG F  
  
T 2:UNL PLUS  
VOLUME      = 1353 GALS  
ULLAGE      = 6476 GALS  
90% ULLAGE  = 5693 GALS  
TC VOLUME   = 1329 GALS  
HEIGHT      = 21.99 INCHES  
WATER VOL   = 0 GALS  
WATER       = 0.00 INCHES  
TEMP        = 84.7 DEG F  
  
T 3:SUPER UNL  
VOLUME      = 899 GALS  
ULLAGE      = 6930 GALS  
90% ULLAGE  = 6147 GALS  
TC VOLUME   = 881 GALS  
HEIGHT      = 16.76 INCHES  
WATER VOL   = 0 GALS  
WATER       = 0.00 INCHES  
TEMP        = 87.5 DEG F  
  
* * * * * END * / * * *
```

The printout from the ATG for the tank test looks like this:

```
MMM DD, YYYY HH:MM XM  
  
LEAK TEST REPORT  
  
T 1: (product label)  
PROBE SERIAL NUM 105792  
  
TEST STARTING TIME:  
MMM DD, YYYY HH:MM XM  
  
TEST LENGTH   = 4.3 HRS  
STRT VOLUME   = 3725 GALS  
  
LEAK TEST RESULTS  
0.2 GAL/HR TEST PASS
```

If the ATG has CSLD (continuous statistical leak detection), the printout would look like this:

```
CSLD TEST RESULTS
-----
DD-MM-YY HH:MM XM

T 2: (product label)

PROBE SERIAL NUM 123002
0.2 GAL/HR TEST
PER: DD-MM-YY PASS
```

If electronic line leak detection is provided, the ATG will also printout the line test results. The printout would look like this:

```
MMM DD, YYYY HH:MM XM

PRESSURE LINE LEAK TEST HISTORY

Q 1: (product label)

LAST 3.0 GAL/HR PASS:
MMM DD, YYYY HH:MM XM

FIRST 0.20 GAL/HR PASS EACH MONTH:

MMM DD, YYYY HH:MM XM
MMM DD, YYYY HH:MM XM
MMM DD, YYYY HH:MM XM
MMM DD, YYYY HH:MM XM

FIRST 0.10 GAL/HR PASS EACH MONTH:

MMM DD, YYYY HH:MM XM
MMM DD, YYYY HH:MM XM
MMM DD, YYYY HH:MM XM
MMM DD, YYYY HH:MM XM
```

Some ATG units also have the capability to monitor other liquid sensors, even differentiate between hydrocarbons and other liquids such as the interstice of the tank, STP sumps or sumps at the dispensers. A printout would look like this:

```
LIQUID STATUS
-----
MMM DD, YYYY HH:MM XM

L1: UNLEADED ANNULAR
SENSOR NORMAL

L2: SUPER ANNULAR
SENSOR NORMAL
```

Note: It is very important that the printouts from the ATG be kept as a record to show that the tanks are tight and if there are any alarms or warning, **do not ignore** them, and call Petroleum Solutions, Inc. as soon as possible to determine the cause and resolve the problem.

If electronic line leak detection is provided, printout the line test results once per month.

Inventory control, what is it and why does it need to be done

From the TCEQ rules relating to inventory control:

§334.48. General Operating and Management Requirements.

(a) Prevention of releases. All owners and operators of underground storage tank (UST) systems shall ensure that the systems are operated, maintained, and managed in a manner that will prevent releases of regulated substances from such systems.

(b) UST system management. UST systems shall be operated, maintained, and managed in accordance with accepted industry practices.

(c) Inventory control. On or after the effective date of this subchapter, regardless of which method of release detection is used for compliance with §334.50 of this title (relating to Release Detection), effective manual or automatic inventory control procedures shall be conducted for **all UST systems at retail service stations** as defined in §334.2 of this title (relating to Definitions). Such inventory control procedures shall be in accordance with §334.50(d)(1)(B) of this title. Complete and accurate inventory records shall be maintained in accordance with §334.10 of this title (relating to Reporting and Recordkeeping).

§334.50. Release Detection.

334.50(d)(1)(B)

(B) Inventory control. All inventory control procedures shall be in conformance with the following requirements.

(i) All inventory control procedures shall be in accordance with a code or standard of practice developed by a nationally recognized association or independent testing laboratory.

(ii) Reconciliation of detailed inventory control records shall be conducted at least once each month, and shall be sufficiently accurate to detect a release as small as the sum of 1.0% of the total substance flow-through for the month plus 130 gallons.

(iii) The operator shall assure that the following additional procedures and requirements are followed.

(I) Inventory volume measurement for regulated substance inputs, withdrawals, and the amount still remaining in the tank shall be recorded each operating day.

(II) The equipment used shall be capable of measuring the level of stored substance over the full range of the tank's height to the nearest 1/8 inch.

(III) Substance dispensing shall be metered and recorded within an accuracy of six or less cubic inches for every five gallons of product withdrawn.

(IV) The measurement of any water level in the bottom of the tank shall be made to the nearest 1/8 inch at least once a month, and appropriate adjustments to the inventory records shall be made.

What is inventory control - Inventory control is used along with the ATG for monthly release detection for the tanks. It takes into account the amount in the tank at the beginning of the day (from the ATG), any deliveries, gallons pumped out to the vehicles and then what is in the tank (from the ATG) at the end of the day. The amount in the tank at the end of the day is compared with what is calculated to be in the tank, and this gives an over/short for that day.

At the end of the month, the total over/short is calculated and compared to the allowable amount based on 1% of the total gallons pumped for the month plus 130 gallons. As long as this number **is larger** than the sum of the over/short for the month, based on inventory control, it is within allowable limits as per TCEQ requirements.

Inventory control is not difficult to do. At Petroleum Solutions, Inc. we have made an easy to fill in template in Microsoft Excel, which can be emailed to you. To get this program, please call Bill Morris at the McAllen office at 1-800-880-9582.

Some important things to remember when doing inventory control

- ❑ Always use **gross gallons** for the amount of fuel in the tank from the ATG and delivered from the delivery ticket
- ❑ Be sure to take all readings, gallons sold for the day and inventory in the tank from your ATG **at the same time**. This is very important and a common mistake made. For example if you close the register for the day at 11:45 p.m., press the print button on the ATG at the same time. Most ATG's are set up to printout at a designated time, however this may not be the same time you close out sales for the day.
- ❑ Do the inventory control on a daily basis so if there are any discrepancies they can be resolved quickly.
- ❑ If you have a blending system for unleaded plus, this will need to be taken into account.

Spill & overfill, what are the TCEQ requirements?

From the TCEQ rules relating to spill/overfill and tight-fill fittings:

§334.51. Spill and Overfill Prevention and Control.

(b) Spill and overfill prevention equipment. Except as provided in paragraph (4) of this subsection, all UST systems shall be equipped with spill and overfill prevention equipment which shall be designed, installed, and maintained in a manner that will prevent any spilling or overfilling of regulated substances resulting from transfers to such systems, as provided in this subsection.

(1) Compliance schedule.

(A) New UST systems installed on or after the effective date of this subchapter shall be in compliance with the equipment provisions of this subsection from the time of installation through the entire operational life of the system.

(B) Existing UST systems (i.e., UST systems for which installation has commenced or has been completed on or prior to December 22, 1988) shall be in compliance with the equipment provisions of this subsection beginning no later than December 22, 1994, and continuing for the remainder of the operational life of the system.

(2) Equipment required. UST systems shall be equipped with each of the following spill and overfill prevention equipment or devices.

(A) Tight-fill fitting. The fill pipe of the tank shall be equipped with a tight-fill fitting, adapter, or similar device which shall provide a liquid-tight seal during the transfer of regulated substances into the tank.

(B) Spill containment equipment. The fill tube of the tank either shall be equipped with an attached spill container or catchment basin, or shall be enclosed in a liquid-tight manway, riser, or sump, and such equipment shall meet the following requirements.

(i) The spill containment device shall be designed to prevent the release of regulated substances to the environment when the transfer hose or line is detached from the fill pipe.

(ii) The spill containment device shall be equipped with a liquid-tight lid or cover designed to minimize the entrance of any surface water, groundwater, or other foreign substances into the container.

(C) Overfill prevention equipment. Each tank shall be equipped with a valve or other appropriate device that shall be designed to either:

(i) automatically shut off the flow of regulated substances into the tank when the liquid level in the tank reaches a preset level which shall be no higher than the 95% capacity level for the tank; or

(ii) automatically restrict the flow of regulated substances into the tank when the liquid level in the tank reaches a preset level which shall be no higher than the 90% capacity level for the tank, provided that such flow restricting device shall also alert the person responsible for the delivery when such preset level is reached; or

(iii) emit an audible and visible alarm capable of alerting the person responsible for the delivery when the liquid level in the tank reaches a preset level which shall be no higher than the 90% capacity level for the tank, provided that the tank is also equipped with a valve or other device which is designed to automatically shut-off or automatically restrict the flow of regulated substances into the tank when the liquid level reaches a preset level which shall be no higher than the 98% capacity level for the tank.

Where is the tight-fill, and spill containment located?

When you remove the cover at the fill tube where fuel is delivered to the tank, it will look similar to this:



Showing the spill containment, fill cap attached to the tight-fill fitting

The 5-gallon sealed bucket prevents spilled fuel from going into the ground if some is spilled from the hose when it is disconnected from the fill tube after delivery. The tight-fill connector assures that during fuel delivery, there is a tight connection from the delivery truck. The spill buckets should be checked regularly and emptied of any fuel or water.

Overfill equipment

Overfill equipment prevents the tank from being accidentally being overfilled and spilling fuel in the area of the tank as well as being blown out the vent lines. A delivery shut-off valve is part of the drop tube that goes in the fill and shuts off the flow of fuel at 95%, with a small bleed-by that would allow the hose from the fuel truck to still go into the tank once it was shut off. It would look like this:



Showing the drop tube with the delivery shut-off valve

The other method is a flow restrictor valve (vent ball-float) that is installed in the vent line and shuts off the vent at 90%, which prevents additional fuel from going into the tank.



Vent ball-float

Corrosion protection, what are the TCEQ requirements?

From the TCEQ rules relating to corrosion protection:

§334.49. Corrosion Protection.

(c) Cathodic protection systems.

(1) Factory-installed cathodic protection systems.

(A) A factory-installed cathodic protection system on any UST component shall be designed, fabricated, installed, operated, and maintained in accordance with applicable codes or standards of practice developed for such cathodic protection method by a nationally recognized association or independent testing laboratory.

(B) At a minimum, the factory-installed cathodic protection system shall include the following components:

(i) a suitable dielectric external coating or laminate, which shall thoroughly cover all exterior surfaces exposed to the soil, backfill, or groundwater, and which shall consist of materials which are compatible with the stored regulated substances;

(ii) dielectric isolation bushings, connections, or fittings, which shall be installed at all locations where the protected component connects to other metallic system components, and which shall be constructed of materials which are compatible with the stored regulated substances; and

(iii) sacrificial anodes which are firmly attached and electrically connected to the protected components and which are positioned and sized to provide complete cathodic protection for all parts of the protected component.

(2) Field-installed cathodic protection systems.

(A) A field-installed cathodic protection system on any UST system component shall be designed by a qualified corrosion specialist, and shall be designed, installed, operated, and maintained in accordance with applicable codes or standards of practice developed for such cathodic protection systems by a nationally recognized association or independent testing laboratory.

(B) Impressed current cathodic protection systems shall be designed and equipped with appropriate equipment or devices capable of indicating the operational status of the system at all times.

(C) In addition to the standard inspection and testing requirements for all cathodic protection systems required in paragraph (4) of this subsection, all impressed current cathodic protection systems shall be regularly inspected by the owner or operator (or the owner's designated representative) to ensure

that the rectifier and other system components are operating properly. Such inspections shall be performed at least once every 60 days.

(3) Test stations and connections. To allow for the periodic testing required in paragraph (4) of this subsection, any factory-installed or field-installed cathodic protection system shall include appropriate connections, insulated lead wires, and accessible test stations. All lead wires connected to the tanks, anodes, reference electrodes, and other components associated with the cathodic protection system shall terminate at one or more test stations. The termination of each lead wire at a test station shall be clearly labeled or coded to properly identify the specific component to which it is connected.

(4) Inspection and testing requirements for all cathodic protection systems.

(A) Except as provided in subsection (d)(2) of this section, all cathodic protection systems which are used to provide corrosion protection for any component of a UST system shall be inspected and tested to determine the adequacy of the cathodic protection by a qualified corrosion specialist or corrosion technician in accordance with the requirements in this paragraph.

(B) The inspection and testing criteria used to determine the adequacy of the cathodic protection shall be in accordance with a code or standard of practice developed by a nationally recognized corrosion association or independent testing laboratory.

(C) All cathodic protection systems shall be inspected and tested for operability and adequacy of protection within three to six months after installation and at a subsequent frequency of at least once every three years.

In summary:

Any new system that was installed after 1988 had to be provided with corrosion protection. Any existing system after December 22, 1998, that required corrosion protection, had a corrosion protection system (such as steel tanks or piping or swing joints) designed by a NACE qualified engineer and installed. This system would need to be re-certified every three years to verify it was meeting requirements.

There are basically two types:

- Sacrificial anodes: These are usually installed at the factory on the tanks and would need to be tested every three years. Sometimes bagged anodes were installed to protect steel piping. These would also need to be tested every three years.
- Impressed current system: A qualified NACE engineer designs these systems. The system is tested initially, three to six months after installation and every three years thereafter. **Note:** With this type of system, the meter readings from the rectifier need to be recorded at a minimum of every 60 days. If the readings are less than the initial readings, the equipment supplier should be contacted immediately.

If you have either one of these two types of systems, or don't have a corrosion protection system as required, please contact Petroleum Solutions, Inc. at the McAllen office at 1-800-880-9582

Financial Assurance

Owners of UST systems that come under the TCEQ rules, Chapter 337, Subchapter I petroleum storage tank assurance requirements are required to have insurance to cover the cost of remediation (clean up if there was a leak from the UST system) called 1st party and insurance to cover 3rd party (a release damages someone else property).

The required coverage for each is \$1,000,000. Most UST owners purchase the required insurance from a private company. Cities and local government are usually self-insured, but they must be able to prove they can cover the cost for remediation.

Check with your current insurance provider for your location and they can guide you on how to get the required insurance.

For additional information, contact the TCEQ Financial Assurance Section at (512) 239-0300 or call PSI at 1-800-880-9582, and ask for Bill.