Revised April 2022
RG-543

Compliance Notebook for Underground Storage Tanks

Program Support and Environmental Assistance Division

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

printed on
recycled paper

Underground Storage Tank Compliance Notebook

Facility Name _____

Address _____

PST ID Number _____

Contact Name _____

Contact Information _____

Prepared by
Program Support and Environmental Assistance Division

RG-543
Revised April 2022

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tceq.texas.gov/publications

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How to Use This Notebook

This compliance notebook is for owners and operators of underground storage tanks (USTs) and UST systems.

Use this notebook as a template to organize your facility's records and show compliance with requirements. There are log sheets, links to applicable forms, references to regulations, record retention timeframes, and other technical guidance included in each section. The log sheets are suggested templates to help you collect required information. Some sample reports have multiple versions to show different reporting system formats.

Place records from your system in their appropriate section to keep them organized.

The information in this document may be subject to change with policy and rule changes.

Where to Find More Information

- Request records from TCEQ by contacting the **Central Records Section** at (512) 239-2900 or cfrreq@tceq.texas.gov.
- Search for TCEQ forms[1] using a keyword, form number, or subject.
- Review the *Petroleum Storage Tank (PST) Super Guide*[2] (TCEQ publication RG-475). A comprehensive guide to following PST regulations in Texas.

1. www.tceq.texas.gov/search_forms.html
2. www.tceq.texas.gov/assistance/industry/pst/rg-475

Find applicable rules in the following chapters of Title 30, Texas Administrative Code[3] (30 TAC):

- **Chapter 37:** Financial Assurance
- **Chapter 113:** Standards of Performance for Hazardous Air Pollutants and for Designated Facilities and Pollutants
- **Chapter 115:** Control of Air Pollution from Volatile Organic Compounds
- **Chapter 334:** Underground and Aboveground Storage Tanks

This document is a general guide to laws and regulations about USTs and an aid to minimize potential health risks. It does not replace those laws and regulations, which take priority over any information supplied here.

If your tank system is in Kinney, Uvalde, Medina, Bexar, Comal, Hays, Travis, or Williamson County, you may have other requirements related to protecting the Edwards or Trinity aquifers. See 30 TAC Chapters 213 and 214 for more information.

Local governments and other state and federal agencies may have more rules and requirements. As the owner or operator of the UST, you must ensure compliance with all applicable laws and regulations.

If you sell motor fuels, register your facility with Texas Department Licensing and Registration (TDLR). Renew your registration each year and keep TDLR Consumer Information stickers on each side of your dispensers.

- Find more information on TDLR's Registration for Motor Fuel Metering Devices[4] webpage.

If you have questions or need more information about UST requirements, please refer to the Small Business and Local Government Assistance (SBLGA) webpage[5] or call the SBLGA Hotline at 800-447-2827 or email us at TexasEnviroHelp@tceq.texas.gov.

3. www.tceq.texas.gov/goto/view-30tac
4. www.tdlr.texas.gov/fmq/fmqforms.htm
5. www.texasenvirohelp.org

Rule Citations

The rules that apply to USTs are listed below. Rule citations are from 30 TAC Chapter 334 unless otherwise stated.

Definitions
- 334.2

Construction Notification
- 334.6

Registration and Self-Certification
- 334.7
- 334.8

Reporting and Recordkeeping
- 334.10

General Standards
- 334.42

Implementation Schedules
- 334.44

Technical Standards for New UST Systems
- 334.45

Technical Standards for Existing UST Systems
- 334.47

General Operating and Management Requirements
- 334.48

Corrosion Protection
- 334.49

Release Detection
- 334.50

Spill and Overfill Prevention and Control
- 334.51

Temporary Removal from Service
- 334.54

Permanent Removal from Service
- 334.55

Release Reporting and Corrective Action
- 334, Subchapter D

Operator Training
- 334, Subchapter N

Financial Assurance
- Chapter 37, Subchapter I

Stage I and Stage II Vapor Recovery
- Chapter 115, Subchapter C

Definitions

334.2(85) Petroleum storage tank (PST): Any one or combination of aboveground storage tanks, underground storage tanks, and all connecting underground pipes that contain petroleum products.

334.2(120) Underground storage tank (UST): A storage tank and any connecting underground pipes used to contain a regulated substance, when the volume of the tank and connecting underground pipes is 10% or more beneath the surface of the ground.

334.2(4) Aboveground storage tank (AST): A storage tank and any associated piping designed to contain petroleum products that is located above the surface of the ground or the floor of an underground structure (such as a basement or vault). They are non-vehicular and made of non-earthen materials.

334.2(84) Petroleum product: A petroleum substance obtained from distilling and processing crude oil that is liquid at standard conditions of temperature and pressure, and capable of being used as a fuel for the propulsion of a motor vehicle or aircraft. Petroleum products include, but are not limited to:

- Motor oil and aviation gasoline
- Gasohol and other alcohol blended fuels
- Kerosene
- Distillate fuel oil
- Number 1 and Number 2 diesel
- Biodiesel blended with Number 1 or Number 2 diesel

The definition does not include naphtha-type jet fuel, kerosene-type jet fuel, or a petroleum product for use in chemical manufacturing.

334.2(96) Regulated substance: An element, compound, mixture, solution, or substance that, when released into the environment, may present substantial danger to the public health, welfare, or the environment. For petroleum storage tanks, this includes any:

- Petroleum substance.
- Mixture of two or more hazardous substances or petroleum substances.
- Other substance designated by TCEQ to be regulated under 30 TAC 334.

For specific rule language on these and other definitions, please see 30 TAC 334.2.

Registration and Self-Certification Records

Applicable Regulations: 30 TAC 334.7, 30 TAC 334.8, and 30 TAC 334.10

Get Registration and Delivery Certificates

Unless it is exempt or excluded, register your underground storage tank (UST) and tell us about any changes within 30 days.

- See 30 TAC 334.3 for UST exemptions[6] and 30 TAC 334.4 for UST exclusions.[7]

To receive fuel deliveries, certify each year that your UST meets rule requirements.

- Renew your certification **at least 30 days before it expires**.
- Post a copy of your certificate at your facility so it is visible during fuel deliveries.

To register and self-certify, submit a PST registration and self-certification application online[8] through STEERs or complete a Registration and Self-Certification form[9] (TCEQ-00724) and either:

- Fax to: (512) 239-3398
- Mail to:

  Petroleum Storage Tank Registration Team (MC-138)
  Texas Commission on Environmental Quality
  P.O. Box 13087
  Austin, TX 78711-3087

Make sure the numbers you assign to tanks and compartments on your registration match the physical numbers at your facility.

Keep Records

Keep copies of:

- Completed Registration and Self-Certification forms or confirmation of STEERS submissions
- Temporary delivery authorizations (if you received one)

Keep all records for **at least 5 years**.

Attachments

1. *Figure 1. Delivery Certificate Example*

6. www.tceq.texas.gov/goto/ust-exemptions
7. www.tceq.texas.gov/goto/ust-exclusions
8. www.tceq.texas.gov/goto/steers
9. www.tceq.texas.gov/goto/00724

Notes

Figure 1. Fuel Delivery Certificate Example

Texas Commission on Environmental Quality
Petroleum Storage Tank Program

Delivery Certificate

(Non-Transferable)

Expires Last day of:
September 2021
TCEQ Form PST05 (5-10-11)
For The Commission

This hereby certifies that the underground storage tanks (USTs) at the facility identified herein have been self-certified as compliant with all technical and administrative standards for fuel delivery purposes. This certificate verifies self certification only, and does not certify that the listed USTs are in compliance with TCEQ's Technical and Administrative requirements. *Prior to retail sale of fuel to the public using measured dispensing devices, any meter must be registered with the Texas Department of Agriculture.*

Owner/Operator #: 000000

PETROLEUM STORAGE COMPANY, LLC

PO BOX 123

CITY, TX 12345-6789

Facility #: 0000000

CITY GAS STATION

1234 STATE HIGHWAY 63

CITY, TX 12345-6789

Self-Certified UST's: 1, 2A, 2B

For the specific time period and the Underground Storage Tanks (USTs) indicated, this certificate verifies self-certification by the tank owner or operator of compliance with TCEQ rule requirements listed at 30 TAC Sec. 334.8(c)(3)(D) [regarding tank registration, payment of registration fees, UST financial responsibility (e.g., insurance), and technical standards (release detection, spill/overfill prevention, corrosion protection & variances issued by the agency to any of these standards)]. The Texas Water Code Sec. 26.346 requires the tank owner or operator to accurately complete the parts of the registration and self-certification form pertaining to the self-certification of compliance with UST administrative requirements and technical standards.

- *After 12/22/98, the state's petroleum storage tank remediation (PSTR) fund is no longer an acceptable UST financial responsibility mechanism for corrective action. Owners or operators of regulated petroleum USTs must now maintain required coverage for BOTH corrective action AND third-party bodily injury/property damage by other allowable mechanisms (e.g., insurance).*
- *If a confirmed petroleum release from an eligible storage tank was first discovered and reported to the TCEQ after 12/22/98, none of the associated cleanup costs are eligible for reimbursement or payment from the state's PSTR fund. [Water Code 26.3512(b)(5)].*
- *Prior to retail sale of fuel to the public using measured dispensing devices, any meter must be registered with the Texas Department of Agriculture.*

TCEQ LPS Form PST05A (05-10-11) **http://www.tceq.texas.gov/permitting/registration/pst/pst_query.html**

Notes

Financial Assurance Records

Applicable Regulations: 30 TAC 37 Subchapter I and 30 TAC 334.10

Get Financial Assurance

You must have proof of financial assurance that includes corrective action and third-party liability.

- **Corrective action** covers the cost to cleanup accidental releases from USTs.
- **Third-party liability** compensates others for physical harm and property damage caused by such releases.

The amount of financial assurance you need varies between facilities.

Your options include:

- **Insurance or surety bond** through an insurance agent.
- **Financial test**, a self-insurance used by large companies.
- **Corporate guaranty**, a self-insurance by a parent company.
- **Trust or letter of credit** through a bank or credit union.
- **Local-government financial test**, a self-insurance for local governments.

Whichever you choose, it must meet the requirements in 30 TAC 37, Subchapter I[10] and use the **exact** wording of the rule samples found there.

- See our guide to *Financial Assurance for PSTs*[11] (RG-475i) for more information.

Keep Records

Keep a copy of your current Certificate of Insurance or other proof of financial assurance such as a letter of credit from a bank or account.

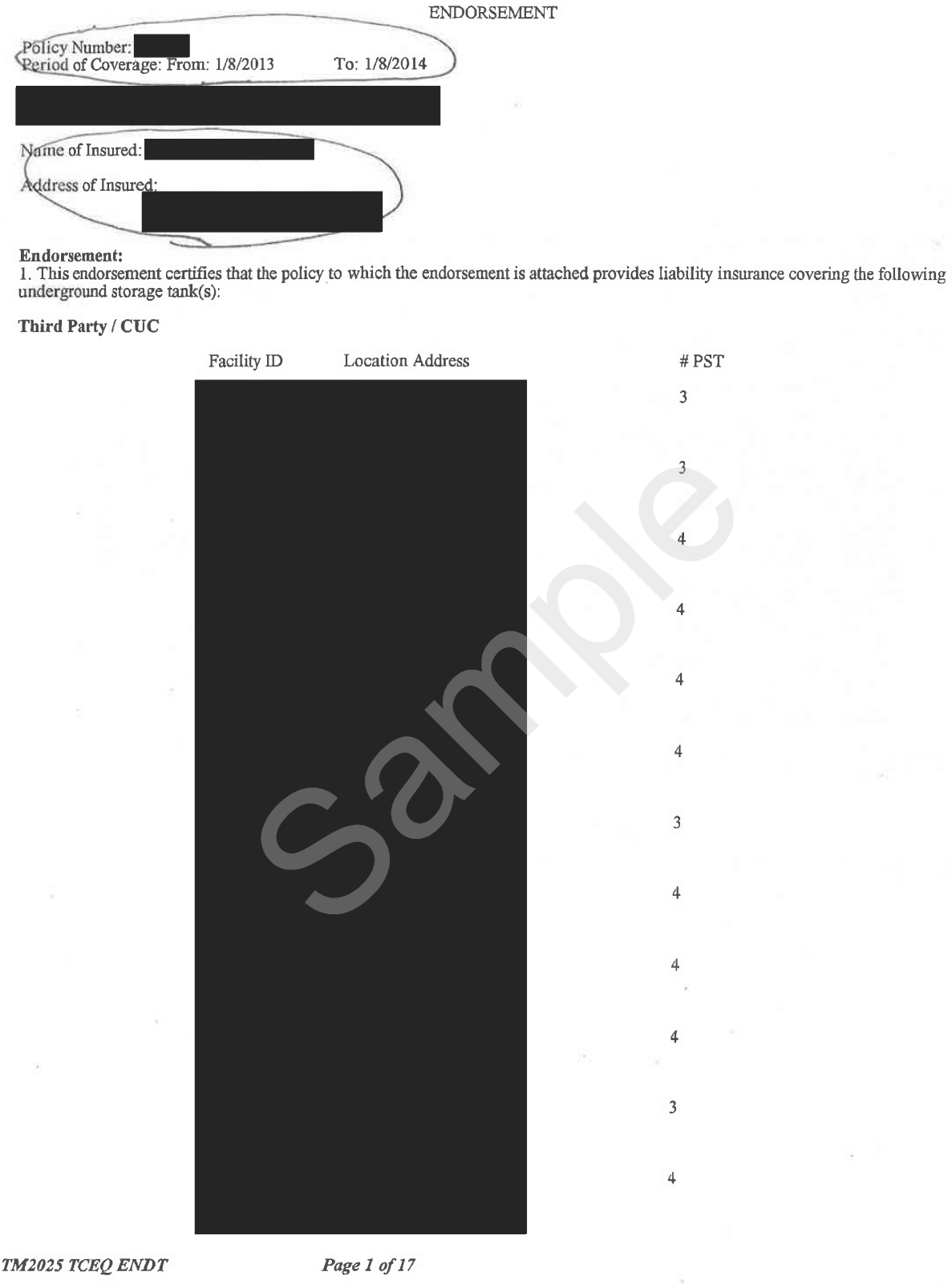
Attachments

1. *Figures 2 and 3. Certificate of Insurance Example (First and Last Page)*

10. www.tceq.texas.gov/goto/pst-financial-assurance
11. www.tceq.texas.gov/downloads/assistance/publications/rg-475i-financial-assurance-for-petroleum-storage-tanks

Notes

Figure 2. Financial Assurance for PSTs Example (First Page)



ENDORSEMENT

Policy Number: [redacted]
Period of Coverage: From: 1/8/2013 To: 1/8/2014

[redacted]

Name of Insured: [redacted]

Address of Insured: [redacted]

Endorsement:
1. This endorsement certifies that the policy to which the endorsement is attached provides liability insurance covering the following underground storage tank(s):

Third Party / CUC

Facility ID	Location Address	# PST
[redacted]	[redacted]	3
		3
		4
		4
		4
		4
		3
		4
		4
		4
		3
		4

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Figure 3. Financial Assurance for PSTs Example (Last Page)

[redacted] 3

3

for taking corrective action and/or compensating third parties for bodily injury and property damage caused by accidental releases; in accordance with and subject to the limits of liability, exclusions, conditions, and other terms of the policy; arising from operating the underground storage tank(s) identified above.

The limits of liability are **$1000000** for each occurrence and **$3000000** for the annual aggregate, exclusive of legal defense costs. This coverage is provided under Policy Number [redacted] The effective date of said policy is: **1/8/2013**

2. The Insurance afforded with respect to these occurrences is subject to all the terms and conditions of the policy; provided, however, that any provisions inconsistent with subparagraphs (a)-(e) of this paragraph are to be amended to confirm with these subparagraph:
   a. Bankruptcy or insolvency of the insured shall not relieve the Insurer of its obligations under the policy to which this endorsement is attached.
   b. The Insurer is liable for the payment of amounts within any deductible applicable to the policy, to the provider of corrective action or a damaged third party, with a right of reimbursement by the insured for any payment made by the Insurer. This provision does not apply with respect to that amount of any deductible for which coverage is demonstrated under another mechanism or combination of mechanisms as specified in Title 30, TAC, §37.825 of this title, §37.830 of this title, §37.835 of this title, §37.840 of this title, §37.845 of this title and §37.850 of this title.
   c. Whenever requested by the Executive Director of the Texas Commission on Environmental Quality (TCEQ), the Insurer agrees to furnish to the Executive Director a signed duplicate original of the policy and all endorsements.
   d. Cancellation or any other termination of the insurance by the Insurer, except for non-payment of premium or misrepresentation by the insured, will be effective only upon written notice and only after the expiration of 60 days after a copy of this written notice is received by the insured. Cancellation for non-payment of premium or misrepresentation by the insured will be effective only upon written notice and only after expiration of a minimum of ten days after a copy of such written notice is received by the insured.
   e. The insurance covers claims otherwise by the policy that are reported to the Insurer within six months of the effective date of cancellation or non-renewal of the policy except where the new or renewed policy has the same retroactive date or a retroactive date earlier than that of the prior policy, and which arise out of any covered occurrence that commenced after the policy retroactive date, if applicable, and prior to such policy renewal or termination date. Claims reported during such extended reporting period are subject to the terms, conditions, limits including limits of liability, and exclusions of the policy.

I hereby certify that the wording of this instrument is identical to the wording in Title 30, Texas Administrative Code, §37.835 (b) (1) and that the Insurer is licensed to transact the business of insurance in Texas.

[redacted]

Authorized Representative of [redacted]

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Corrosion Protection Records

Applicable Regulations: 30 TAC 334.10 and 30 TAC 334.49

Protect Underground Components from Corrosion

Protect all underground metal components of a UST system that hold or convey regulated substances from corrosion. Some of these components include tanks, piping, valves, fittings, flexible connectors, swing joints, and shear valves.

Potential corrosion protection methods include components that are:

- Made from noncorrodible material
- Kept electrically isolated from surrounding soil, backfill, or water
- Coated with dielectric material and equipped with factory- or field-installed cathodic protection systems

Use tanks that are factory-constructed as:

- A composite of steel and fiberglass-reinforced plastic (FRP)
- Steel bonded with an external FRP cladding, laminate, or coating
- Steel bonded with an external polyurethan coating
- Steel completely contained within a nonmetallic tank jacket

For more information, see our guide to *Protecting PSTs Against Corrosion*[12] (RG-475f).

Keep Records

Table 1 on page 17 shows your record-keeping options depending on the type of equipment and protection you use. Choose **at least one** option for each piece of equipment at your facility that requires corrosion protection.

Keep copies of all records for **at least 5 years**.

Attachments

1. *Table 1. Record Options for Corrosion Protection*
2. *60-Day Rectifier Inspection Instructions and Log Sheet*
3. *Figure 4. FRP Tank "Ribs" Seen Through Sump Opening*
4. *Figure 5. FRP Tank "Ribs" Seen Through Internal Camera Survey*
5. *Figure 6. Remote Structure-to-Soil Test Results and Summary Example*
6. *Figures 7, 8, and 9. Comprehensive UST System Survey Example (Pages 1 through 3)*

12. www.tceq.texas.gov/downloads/assistance/publications/rg-475f-protecting-underground-storage-tanks-against-corrosion

Notes

Table 1. Record Options for Corrosion Protection

Equipment	Type of Protection	Record Options
Tanks or piping	FRP	Installation records such as an original invoice or a delivery manifest for a tank; **or** A written statement from a licensed professional[a] saying the equipment is FRP or does not need cathodic protection and either: • Photographs of the tank or piping that clearly show FRP construction. • Magnet test results summarizing that the tank is FRP.
Tanks only	Composite, clad, or jacketed steel	Installation records such as an original invoice or a delivery manifest for the tank; **or** A written statement from a licensed professional saying the tank is protected from corrosion and either: • Photographs showing a permanent, factory-applied tag or label clearly displaying tank brand and model or a specification from an acceptable industry code or practice. • Remote structure-to-soil or local tank-to-soil test results with a summary showing the tank is protected from corrosion.
Any metal components[b]	Cathodic system	A 60-day rectifier inspection log for impressed current systems, initial cathodic protection system testing at installation and 3 to 6 months later, **and** 3-year test results.

a. Licensed professionals include UST contractors, on-site supervisors, corrosion technicians, or corrosion specialists.
b. Such as tanks, piping, or equipment in sumps and manways.

Notes

60-Day Rectifier Inspection: Instructions

Check Your Rectifier Status

If you have a cathodic protection system for any metal equipment, check your rectifier's status **at least once every 60 days**.

Document Rectifier Data and Operational Checks

If using our rectifier inspection log sheet, include information about your impressed current system rectifier in the rectifier data table. Use a different sheet for each rectifier if you have more than one.

In the status log table, record the dates you check the system's status. If your rectifier has a meter, also record:

- Output voltage and current
- Number of hours listed

Note any significant difference on the log sheet and report it to your corrosion professional so you can make any necessary repairs or adjustments.

If using your own record-keeping method, document the same information described in our log.

Update Every 60 Days and Keep with Records

Update your log sheets after each status check and keep them in your records for **at least five years** for TCEQ inspections.

Notes

60-Day Rectifier Inspection: Log Sheet

Rectifier Data

Manufacturer and Model		**Serial Number**	
Rated DC Output (Volts)		**Rated DC Output (Amps)**	
Rectifier Output* (Volts)		**Rectifier Output* (Amps)**	

**Record the "as designed" or most recently recommended rectifier output.*

Status Log

Date	Rectifier Turned	Tap Setting (Coarse)	Tap Setting (Fine)	DC Output (Volts)	DC Output (Amps)	Hour Meter	Inspector Initials	Comments

Notes

Figure 4. FRP Tank "Ribs" Seen Through Sump Opening

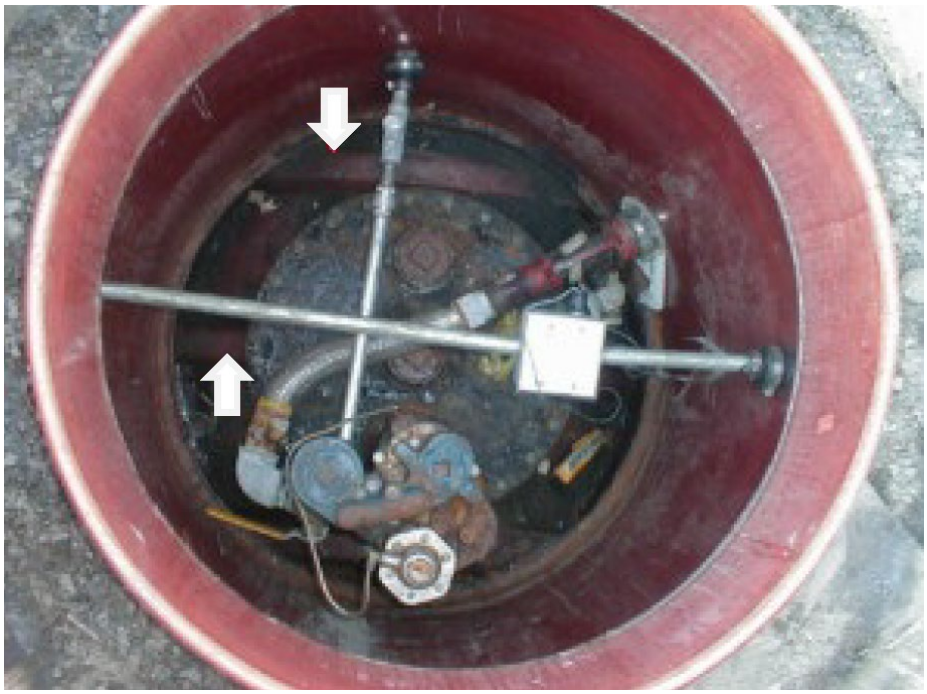


Figure 5. FRP Tank "Ribs" Seen Through Internal Camera Survey

Notes

Figure 6. Remote Structure-to-Soil Test Results and Summary Example

SECTION 2 FIELD INSPECTION RESULTS

Mr. [redacted] (NACE Cert. # [redacted]) was on site on [redacted] to inspect and test the corrosion system.

A structure to soil test was performed with a M.C. Miller copper-copper sulfate reference cell and a Fluke 87 V multi-meter on each tank with the following results.

Tank ID	Product	Fill Top	Fill Bottom	Dispenser	Vent
Tank 1A	Unleaded	-.246	-.504	-.883	-.607
Tank 1B	Diesel	-.733	-.501	-.861	-.606

Tank and Line Type:

The State database indicates the tanks are **FRP.**
The State database indicates the product lines are **FRP.** This is a **Suction** piping system.

FIELD NOTES: All parts of the underground storage tanks are electrically isolated from each other.
The TCEQ Database indicates the tanks are FRP. The field technician protocol is to determine what type tank is being tested. The protocol consists of the following minimum steps for this facility:

1. Determine if the fill risers, sub-pumps or any other risers are electrically continuous or isolated from the tank structure. This can determine if the tank is FRP (isolated), Composite like the STI-P3 or ACT-100 style (isolated with a dielectric bushing) or Steel (continuous).
2. Determine the material substance of tank construction using a powerful Neodymium Magnet. Although FRP tanks may have a metallic striker plate, the magnetic force is significantly less for a FRP tank. The magnet readily identifies and distinguishes between Steel or Composite tanks and FRP tanks.
3. Survey Readings: The electrical millivolt readings are collected from several parts of the UST system with a moving reference cell. Each tank type has a unique set of readings that are consistent with the particular tank (FRP, Steel, Composite ACT-100 style and Composite STI-P3 style).

Although the tanks are listed as FRP, the protocol indicates the tanks are probably Composite. A record search of the tank installation should be conducted to determine this conclusively.
Soil conditions were extremely dry.

SECTION 3 OBSERVATIONS AND RECOMMENDATIONS

The results of the test indicate that the Underground Storage Tank system meets or exceeds the USEPA and TCEQ standard for corrosion protection at the time of the test.

SECTION 4 ADDITIONAL DOCUMENTS AND SITE PHOTOGRAPHS

Notes

Figure 7. Comprehensive UST System Survey Example (Page 1)

Work Order: [redacted]

[redacted]

I. SCOPE:

A UST system survey was conducted on [redacted] for [redacted] at [redacted] The purpose of this survey was to determine if the UST system meets corrosion protection requirements. Structure-to-soil potential measurements, tank diameter measurements, current requirement testing and tank magnet testing were included in the survey and the results are included herein. The results of the survey indicate the UST facility consists of one 15,000-gallon, two 10,000-gallon and one 6,000-gallon single wall tanks. The piping consists of double wall non-metallic flexible.

II. RESULTS & ANALYSIS:

The structure-to-soil potential measurements are tabulated on the attached survey data sheets. The remote potential measurements for the one 15,000-gallon, two 10,000-gallon and one 6,000-gallon single wall tanks risers ranged from -303 millivolts to -659 millivolts. The remote structure-to-soil potential measurements indicated the one 15,000-gallon, two 10,000-gallon and one 6,000-gallon single wall tanks are electrically isolated from their associated risers. The local tank-to-soil potentials on the one 15,000-gallon, two 10,000-gallon and one 6,000-gallon single wall tanks ranged from -568 millivolts to -713 millivolts indicating the tanks do not have cathodic protection.

Tank internal diameter measurements were also obtained. The tank diameter measurements for the one 15,000-gallon, two 10,000-gallon and one 6,000-gallon single wall tanks were 120" for the 15,000-gallon and 10-00-gallon tanks. The diameter for the 6,000-gallon tank was 84". The results of the diameter measurements are not conclusive in determining the 15,000-gallon and 10-00-gallon tanks are steel. The diameter measurement for the 6,000-gallon tank indicates it is steel. Tank magnet testing was performed and a pull indicated all tanks are steel.

Current requirement testing was performed on the tanks by applying current with a 12 DC battery and temporary anode in order to confirm tank electrical isolation/continuity and estimate tank coating type. The current requirement testing was also tabulated on the attached survey data sheets. The potential shifts between current on and current off for the tanks indicate the tanks have a quality coating indicative of the composite tank type.

Figure 8. Comprehensive UST System Survey Example (Page 2)

Work Order: [redacted]

Finally, the external tank coating measurements were recorded. The tank external coating thickness was measured utilizing a Postector 6000 coating thickness gauge. The external coating thickness measurements for the one 15,000-gallon, two 10,000-gallon and one 6,000-gallon single wall tanks were 209, 184, 176 and 208 mils. The tank external coating thickness readings indicate the one 15,000-gallon, two 10,000-gallon and one 6,000-gallon single wall tanks exceed the thickness requirement for composite steel tank type. The tanks were also visually inspected and were determined to have blue pigment which is indicative of a composite steel tank type.

III. CONCLUSIONS:

The results of the remote structure-to-soil potential measurements indicate the one 15,000-gallon, two 10,000-gallon and one 6,000-gallon single wall tanks are steel. The results of the tank diameters were inconclusive in determining the tanks are steel. The coating thickness measurements obtained indicate the one 15,000-gallon, two 10,000-gallon and one 6,000-gallon single wall tanks are a composite steel tank type. The product piping was also found to be double wall non-metallic flexible.

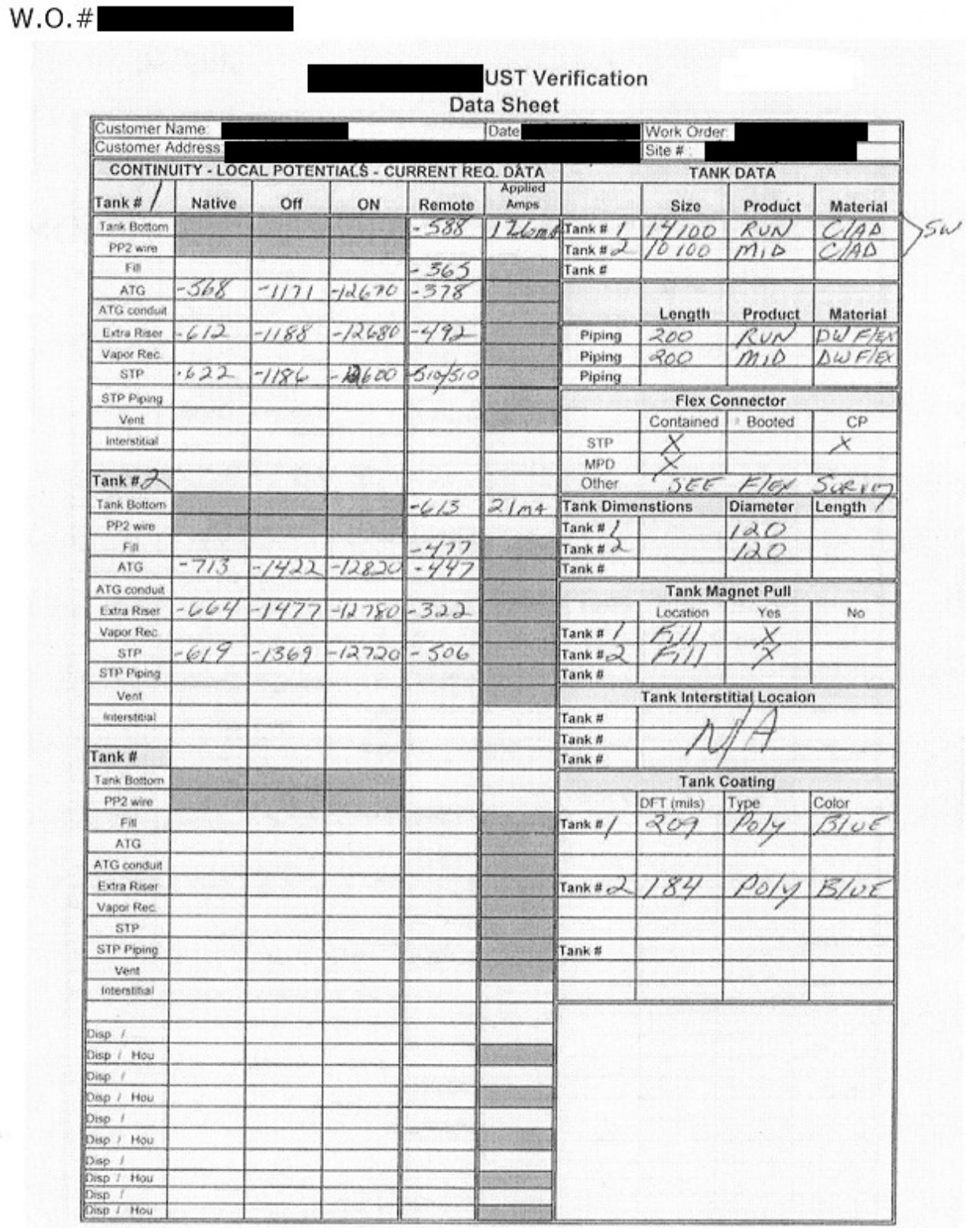
Based on the results of the survey, the UST system meets the technical and corrosion protection requirements under TAC Title 30, Chapter 334, Subchapter C, Rule 334.45 and Rule 334.49 (b) and the UST system does not require cathodic protection. TCEQ registration data base [redacted] has the facility correctly registered as one 15,000-gallon, two 10,000-gallon and one 6,000-gallon single wall composite tanks with double wall non-metallic flexible.

APPENDIX: TEST PROCEDURES

Remote (fixed) structure-to-soil potentials are obtained on all tank/s, associated risers, and piping to a CSE that remains in a fixed location in the electrolyte while obtaining all potentials. The measurements are recorded on the cathodic protection survey data sheets. For example a reading recorded on the ATG row under remote potential is a fixed cell potential from the ATG riser with the CSE located in a remote (fixed) location. Structures of less than 3.0 millivolts (mV) difference are considered electrically continuous with each other. Structures with a difference between 3.0 mV to 10.0 mV indicate an inconclusive electrical continuity test. Structures with a difference of greater than 10.0 mV are considered electrically discontinuous. Additionally in order to confirm the tank material type, the tank diameter was measured at each fill riser.

Local structure-to-soil potentials are obtained over the tanks and/or steel lines to a copper-copper sulfate reference electrode (CSE). The CSE is placed over the steel tank/s and/or steel line/s in the electrolyte to measure cathodic protection levels. The structure-to-soil potential measurements are obtained by making electrical contact to steel structures and CSE placed in various locations in the electrolyte through a Fluke or Beckman digital voltmeter. The digital voltmeter utilized has a minimum of 10 Meg Ohms impedance. The local structure-to-soil potentials are obtained with the magnesium anodes connected. The potentials obtained are evaluated to determine cathodic protection levels. Please see the criterion for cathodic protection. The measurements are recorded on the cathodic protection survey data sheets. Local "on" potentials are recorded on the location where the reference cell was placed. For example, a local "on" potential recorded on the ATG row for tank is the local structure-to-soil potential on that tank with the CSE placed in the electrolyte at the ATG man way.

Figure 9. Comprehensive UST System Survey Example (Page 3)



W.O.# [redacted]

[redacted] UST Verification
Data Sheet

Customer Name: [redacted] Date [redacted] Work Order: [redacted]
Customer Address: [redacted] Site #: [redacted]

CONTINUITY - LOCAL POTENTIALS - CURRENT REQ. DATA						TANK DATA			
Tank # 1	Native	Off	ON	Remote	Applied Amps		Size	Product	Material
Tank Bottom				-588	126mA	Tank # 1	14100	RUN	C/AD
PP2 wire						Tank # 2	10100	MID	C/AD
Fill				-363		Tank #			
ATG	-368	-1171	-12670	-378			Length	Product	Material
ATG conduit						Piping	200	RUN	DW FLEX
Extra Riser	-612	-1188	-12680	-492		Piping	900	MID	DW FLEX
Vapor Rec.						Piping			
STP	-622	-1186	-12600	510/510		Flex Connector			
STP Piping							Contained	Booted	CP
Vent						STP	X		X
Interstitial						MPD	X		
Tank # 2						Other	SEE FLEX SURVEY		
Tank Bottom				-613	21mA	Tank Dimenstions		Diameter	Length
PP2 wire						Tank # 1		120	
Fill				-477		Tank # 2		120	
ATG	-713	-1422	-12820	-447		Tank #			
ATG conduit						Tank Magnet Pull			
Extra Riser	-664	-1477	-12780	-322			Location	Yes	No
Vapor Rec.						Tank # 1	Fill	X	
STP	-619	-1369	-12720	-506		Tank # 2	Fill	X	
STP Piping						Tank #			
Vent						Tank Interstitial Locaion			
Interstitial						Tank #			
						Tank #	N/A		
Tank #						Tank #			
Tank Bottom						Tank Coating			
PP2 wire							DFT (mils)	Type	Color
Fill						Tank # 1	209	Poly	BLUE
ATG									
ATG conduit									
Extra Riser						Tank # 2	184	Poly	BLUE
Vapor Rec.									
STP									
STP Piping						Tank #			
Vent									
Interstitial									
Disp /									
Disp / Hou									
Disp /									
Disp / Hou									
Disp /									
Disp / Hou									
Disp /									
Disp / Hou									
Disp /									
Disp / Hou									

Notes

Release Detection Records

Applicable Regulations: 30 TAC 334.10, 30 TAC 334.48, and 30 TAC 334.50

Include

- Release detection records for tanks (see page 33)
- Release detection records for piping (see page 71)

Instructions

Update records in this section as described for your types of equipment. Find more information about each record on the pages listed above.

- For more information on release detection requirements, see our guide to *PST Release Detection and Inventory Control*[13] (RG-475g).
- If inventory control is part of your release detection methods, see EPA's *Doing Inventory Control Right*[14] guide and our easy-to-use Excel worksheets:
  - Blended Fuel Inventory Control Worksheet[15]
  - Non-Blended Fuel Inventory Control Worksheet[16]

Notes

Tanks and piping installed on or after January 1, 2009, must have secondary containment. Containment sumps (including dispenser sumps) and manways used for interstitial monitoring of piping must be:

- Liquid tight.
- Inspected every year.
- Tested for tightness every 3 years **or** double walled and inspected every 30 days.

After September 1, 2018, these facilities must use interstitial monitoring as their primary release detection method.

13. www.tceq.texas.gov/downloads/assistance/publications/rg-475g-release-detection-and-inventory-control-for-underground-storage-tanks
14. www.epa.gov/ust/doing-inventory-control-right-underground-storage-tanks
15. www.tceq.texas.gov/downloads/assistance/industry/pst/blended-30-day.xlsx
16. www.tceq.texas.gov/downloads/assistance/industry/pst/non-blended-30-day.xlsx

Notes

Release Detection Records for Tanks

Applicable Regulations: 30 TAC 334.10, 30 TAC 334.48(e), 30 TAC 334.48(h),30 TAC 334.50(a)-(b)(1), and 30 TAC 334.50(d)-(e)

Conduct Release Detection Tests

You must conduct and pass a tank release detection test at least once every 30 days using an acceptable method (see Table 2 on page 35). Inspect your release detection equipment every 30 days and annually and test it each year to make sure it works correctly.

Keep Records

Table 2 describes records you must keep for each method of release detection. Keep records on your chosen method as well as walkthrough inspections and testing for **at least 5 years**.

For **walkthrough inspections and equipment testing**, keep:

- Logs of 30-day and yearly inspections and testing
- Results from yearly testing

Attachments

1. *Table 2. Release Detection Methods for Tanks*
2. *30-Day Release Detection Walkthrough Inspection Instructions and Log Sheet*
3. *Figure 10. Example of ATG Test Results*
4. *Figure 11. Example of an SIR Report*
5. *Interstitial Sensor Monitoring Instructions and Log Sheet*
6. *Groundwater or Vapor Well Inspection Instructions and Log Sheets*
7. *Secondary Containment Monitoring Instructions and Log Sheet*
8. *Figure 12. Example of an Interstitial Monitoring Sensor Report*
9. *Manual Tank Gauging Instructions and Log Sheet*
10. *30-Day Tank Gauging Instructions and Log Sheet*
11. *Annual Release Detection Testing and Inspection Instructions and Log Sheet*

Notes

Table 2. Release Detection Methods for Tanks

Release Detection Method	Required Records	Frequency
Automatic Tank Gauging (ATG)	Copies of passing ATG tests[c] Copies of 30-day inventory control records	Within 30 days of last passing test
Statistical Inventory with Reconciliation (SIR)[d]	Results from an SIR vendor stating "Pass," "Fail," or "Inconclusive" Copies of 30-day inventory control records	You must receive results within 15 days following the 30-day period
Interstitial Monitoring[e]	30-day log sheet showing the status of the sensor[f] Records showing interstitial monitoring is your primary method of 30-day release detection (if applicable)	30 days
Groundwater or Vapor Monitoring[g]	Results of the monitoring well Written statement from the well installer that a release from any part of the system will be detected in at least 30 days	Within 30 days of the last reading
30-Day Tank Gauging or Secondary Containment Barriers	Periodic monitoring results	Every 30 days
Manual Tank Gauging	Monitoring results with weekly and 30-day deviations	Every week
30-Day Electronic Leak Monitoring	Test results (receipt from the electronic monitoring equipment)	Every 30 days

c. Tanks must have enough product to conduct a valid test.
d. SIR vendors must use a third-party certified method.
e. Tanks installed or replace on or after January 1, 2009 must use interstitial monitoring as the primary release detection method.
f. Also required for any tank or piping with secondary containment, regardless of release detection method.
g. Monitoring and observation wells must be secured to prevent unauthorized substances from entering them.

Notes

30-Day Release Detection Walkthrough Inspection: Instructions

Inspect Your Equipment and Records

At least once every 30 days make sure your records are complete and up to date, and that your release detection equipment is working normally.

Document Your 30-Day Inspections

If using our release detection walkthrough inspection log sheet, write "yes" or "no" in the first two columns if you inspected those items during the walkthrough. Include the name of the person who performed the inspection and the date.

In the table, note any alarms or unusual operating conditions and any actions you take to correct these issues. Unusual operating conditions may include:

- Dispensing equipment behaving erratically
- Sudden loss of product from the system
- Unexplained water in the tank

If using your own record-keeping method, document the same information described in our log.

Update Every 30 Days and Keep with Records

Update your log sheets after each inspection. Keep them in your records for TCEQ inspections for **at least five years after the last inspection date on the log**.

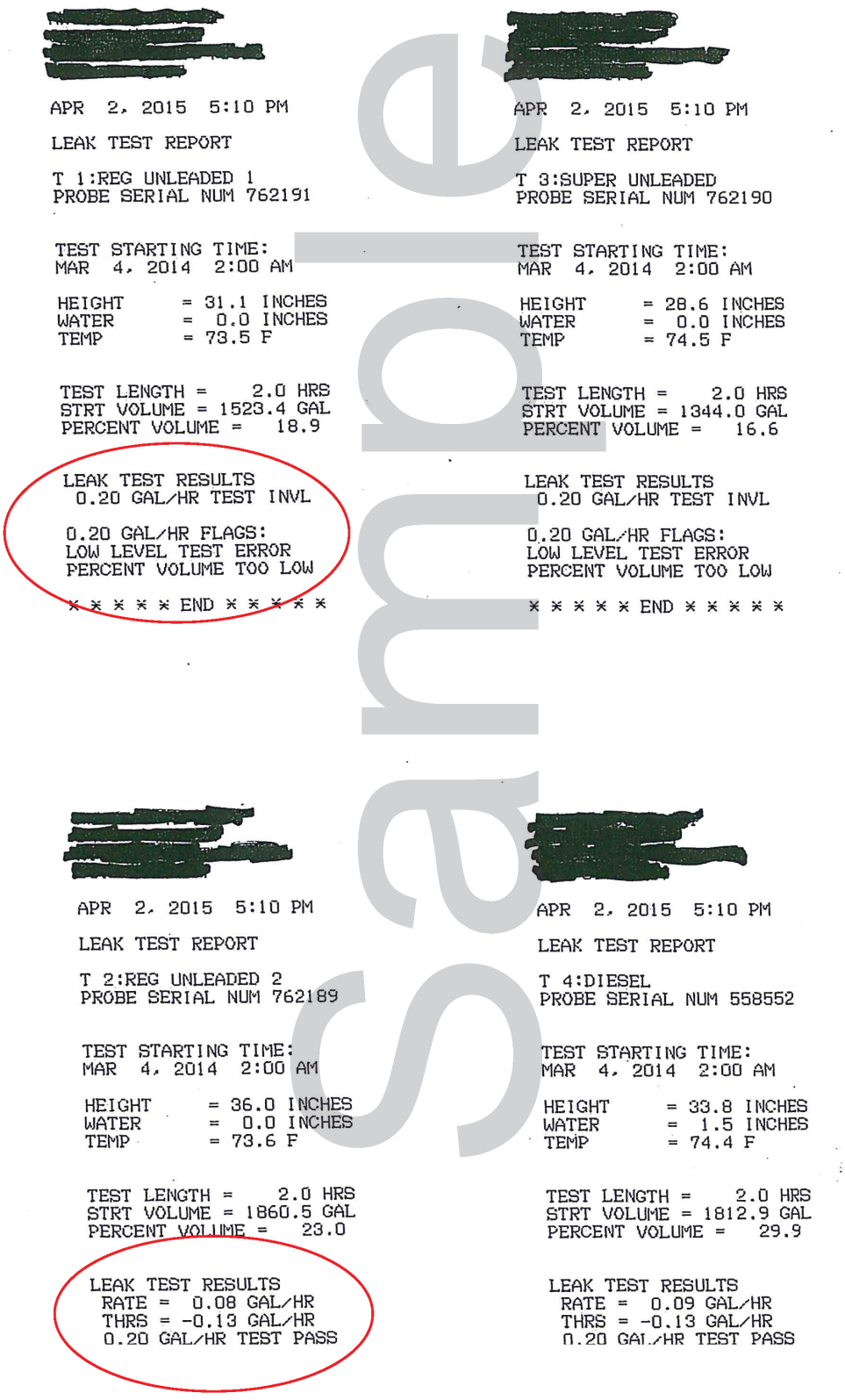
Notes

30-Day Release Detection Walkthrough Inspection: Log Sheet

Records Current?	Equipment Operational?	Name of Inspector	Description of Issues and Corrective Actions Taken (if any)	Date

Notes

Figure 10. Example of ATG Test Results



[redacted]

APR 2, 2015 5:10 PM

LEAK TEST REPORT

T 1:REG UNLEADED 1
PROBE SERIAL NUM 762191

TEST STARTING TIME:
MAR 4, 2014 2:00 AM

HEIGHT = 31.1 INCHES
WATER = 0.0 INCHES
TEMP = 73.5 F

TEST LENGTH = 2.0 HRS
STRT VOLUME = 1523.4 GAL
PERCENT VOLUME = 18.9

LEAK TEST RESULTS
0.20 GAL/HR TEST INVL

0.20 GAL/HR FLAGS:
LOW LEVEL TEST ERROR
PERCENT VOLUME TOO LOW

* * * * * END * * * * *

[redacted]

APR 2, 2015 5:10 PM

LEAK TEST REPORT

T 3:SUPER UNLEADED
PROBE SERIAL NUM 762190

TEST STARTING TIME:
MAR 4, 2014 2:00 AM

HEIGHT = 28.6 INCHES
WATER = 0.0 INCHES
TEMP = 74.5 F

TEST LENGTH = 2.0 HRS
STRT VOLUME = 1344.0 GAL
PERCENT VOLUME = 16.6

LEAK TEST RESULTS
0.20 GAL/HR TEST INVL

0.20 GAL/HR FLAGS:
LOW LEVEL TEST ERROR
PERCENT VOLUME TOO LOW

* * * * * END * * * * *

[redacted]

APR 2, 2015 5:10 PM

LEAK TEST REPORT

T 2:REG UNLEADED 2
PROBE SERIAL NUM 762189

TEST STARTING TIME:
MAR 4, 2014 2:00 AM

HEIGHT = 36.0 INCHES
WATER = 0.0 INCHES
TEMP = 73.6 F

TEST LENGTH = 2.0 HRS
STRT VOLUME = 1860.5 GAL
PERCENT VOLUME = 23.0

LEAK TEST RESULTS
RATE = 0.08 GAL/HR
THRS = -0.13 GAL/HR
0.20 GAL/HR TEST PASS

[redacted]

APR 2, 2015 5:10 PM

LEAK TEST REPORT

T 4:DIESEL
PROBE SERIAL NUM 558552

TEST STARTING TIME:
MAR 4, 2014 2:00 AM

HEIGHT = 33.8 INCHES
WATER = 1.5 INCHES
TEMP = 74.4 F

TEST LENGTH = 2.0 HRS
STRT VOLUME = 1812.9 GAL
PERCENT VOLUME = 29.9

LEAK TEST RESULTS
RATE = 0.09 GAL/HR
THRS = -0.13 GAL/HR
0.20 GAL/HR TEST PASS

Notes

Figure 11. Example of a Statistical Inventory Reconciliation (SIR) Report

Monthly SIR Report - [redacted] Page 1 of 1

[redacted]

MONTHLY STATISTICAL INVENTORY RECONCILIATION (SIR) REPORT
FACILITY NAME: [redacted] FACILITY ID#: [redacted]
TANK LOCATION: [redacted]
Houston, TX 77032
( ) OWNER/ [redacted] PHONE: [redacted]
( ) OPERATOR: [redacted]
Houston, TX 77032

SIR PROVIDER: [redacted] Phone: 1-(772)-[redacted]
SIR VERSION: [redacted] DATE OF SIR REPORT: 09/18/2013 TIME 13:30:40
PERIOD COVERED: 08/13 Data points to calculate leak rate: 20 or more

TANK NUMBER	TANK CONTENTS	TANK CAPACITY	LEAK THRESHOLD	MIN. DET. LEAK RATE	CALCULATED LEAK RATE	CRRNT P	CRRNT F	CRRNT I	PREV. P	PREV. F	PREV. I	2 MO. P	2 MO. F	2 MO. I
1100	Regular	15000	0.005	0.010	0.002		X			X			X	
1300	Premium	6000	0.052	0.104	-0.008			X		X			X	

NOTE: ( ) OWNER/( ) OPERATOR -> Be sure to check the appropriate Status.
CRRNT = Current Month, PREV = Previous Month, 2 MO. = 2 months prior
P|F|I = Pass, Fail and Inconclusive

1. A copy of this SIR report form shall be maintained on-site for review for each month that SIR is used for release detection.
2. [redacted]
3. Results of each monthly analysis must include the calculated results from the data set for leak threshold, the minimum detectable leak rate, the calculated leak rate, and a determination of whether the result of the test was 'Pass', 'Fail', or 'Inconclusive'.
4. 'Pass' means the calculated leak rate for the data set is less than the leak threshold and the minimum detectable leak rate is less then or equal to the certified performance standard (0.2gph).
5. 'Fail' means the calculated leak rate for the data set is equal to or greater than the leak threshold.
6. 'Inconclusive' means the minimum detectable leak rate exceeds the certified performance standard (0.2gph) and the calculated leak rate is less than the leak threshold. If for any other reason the test result is not a 'Pass' or 'Fail', the result is 'Inconclusive'.
7. An Incident Notification Form shall be submitted to the regulators when a monthly SIR report of 'Fail' is received, or after the receipt of one monthly SIR report of 'Inconclusive'.
8. S.I.R monitors the complete UST system, from UST fuel tube to dispenser, including the piping. In certain states passing S.I.R. test can be substituted for annual line test. The UST owner/operator is responsible for obtaining the applicable states regulations concerning S.I.R. and required line test.

Fail/inconclusive for one month - must fill out suspected release for + research portion

Person conducting evaluation: [redacted] Date: 09/18/2013
Signature:
Tank Owner/Operator: Date: __/__/__
Signature:

Notes

Interstitial Sensor Monitoring: Instructions

Monitor Your Interstitial Sensors

If using interstitial monitoring for release detection, check interstitial sensors **at least once every 30 days** for potential product releases.

Document Sensor Inspections

If using our sensor monitoring log sheet, write “tank”, “dispenser” or “sump” for each sensor’s location.

In the sensor status log, write the date you checked your sensors, the status of each one, and any comments. Sign your initials in the completed row to certify you monitored on that date.

If using your own record-keeping method, document the same information described in our log.

Update Every 30 Days and Keep with Records

Update your log sheets after each inspection and keep them in your records for **at least five years** for TCEQ inspections.

Notes

Interstitial Sensor Monitoring: Log Sheet

Sensor Location

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

Sensor Status Log

Date	S1	S2	S3	S4	S5	S6	S7	S8	Inspector Initials	Comments

Notes

Groundwater or Vapor Well Inspection: Instructions

Inspect Monitoring Wells

If using groundwater or vapor monitoring wells for release detection, inspect them **at least once every 30 days** for potential releases. For *groundwater* monitoring devices:

- **Automatic devices** must be able to detect at least one-eighth of an inch of free product on top of the groundwater.
- **Manual methods** must be able to detect a visible sheen or other buildup of regulated substances.

Record Well Data

If using our well inspection log sheet, follow the directions below for your type of well. If using your own record-keeping method, document the same information.

If monitoring with groundwater wells, record the depth (in feet) of the groundwater from the ground's surface and to the bottom of the tank.

If monitoring with vapor wells, record the depth (in feet) from the ground's surface to the bottom of the tank. Include the name and type of vapor monitoring instrument and the date it was last calibrated.

For each inspection:

- Record the date and the depth from the top of the well to the top of the groundwater **or** the vapor reading in parts per million (PPM).
- Check "yes" if there was free product in any of your wells (and write which well(s) in the comments), or "no" if there was none. Include any other related comments.
- Sign your initials to certify you completed the inspection.

Report Any Suspected Releases

If monitoring shows a suspected release, notify TCEQ **within 24 hours**.

- See Suspected Releases from PSTs[17] (RG-475h) for more information.

Update Every 30 Days and Keep with Records

Update your log sheets after each inspection and keep them in your records for **at least five years** for TCEQ inspections.

17. www.tceq.texas.gov/downloads/assistance/publications/rg-475h-suspected-and-confirmed-releases-from-psts

Notes

Groundwater or Vapor Well Inspection: Log Sheet

Groundwater Depth

From Ground Surface:	
To Tank Bottom:	

All depths measured in feet.

Vapor Reading Instrument and Depth Information

Depth from Ground Surface to Tank Bottom:	
Instrument Name and Type:	
Date of Last Instrument Calibration:	

Groundwater or Vapor Monitoring Well Inspections

Date	Well 1	Well 2	Well 3	Well 4	Well 5	Well 6	Free Product in Well?	Comments	Inspector Initials
							☐ Yes ☐ No		
							☐ Yes ☐ No		
							☐ Yes ☐ No		
							☐ Yes ☐ No		
							☐ Yes ☐ No		
							☐ Yes ☐ No		
							☐ Yes ☐ No		
							☐ Yes ☐ No		
							☐ Yes ☐ No		
							☐ Yes ☐ No		
							☐ Yes ☐ No		
							☐ Yes ☐ No		

Notes

Secondary Containment Monitoring: Instructions

Inspect Secondary Containment Barriers

If using secondary containment for release detection, inspect them **at least once every 30 days** for potential product releases.

- Properly secure observation wells to prevent unauthorized substances from entering them.

Record the Following Information

If using our secondary containment log sheet, select the monitoring method you use for secondary containment barriers.

For each inspection:

- Record the date.
- Write "yes" in the appropriate column if you or the sensors detected any free product, or "no" if there was none. Include any related comments.
- Sign your initials to certify you completed the inspection.

If using your own record-keeping method, document the same information described in our log.

Report Any Suspected Releases

If monitoring shows a suspected release, notify TCEQ **within 24 hours**.

- See Suspected Releases from PSTs[18] (RG-475h) for more information.

Update Every 30 Days and Keep with Records

Update your log sheets after each inspection and keep them in your records for **at least five years** for TCEQ inspections.

18. www.tceq.texas.gov/downloads/assistance/publications/rg-475h-suspected-and-confirmed-releases-from-psts

Notes

Secondary Containment Monitoring: Log Sheet

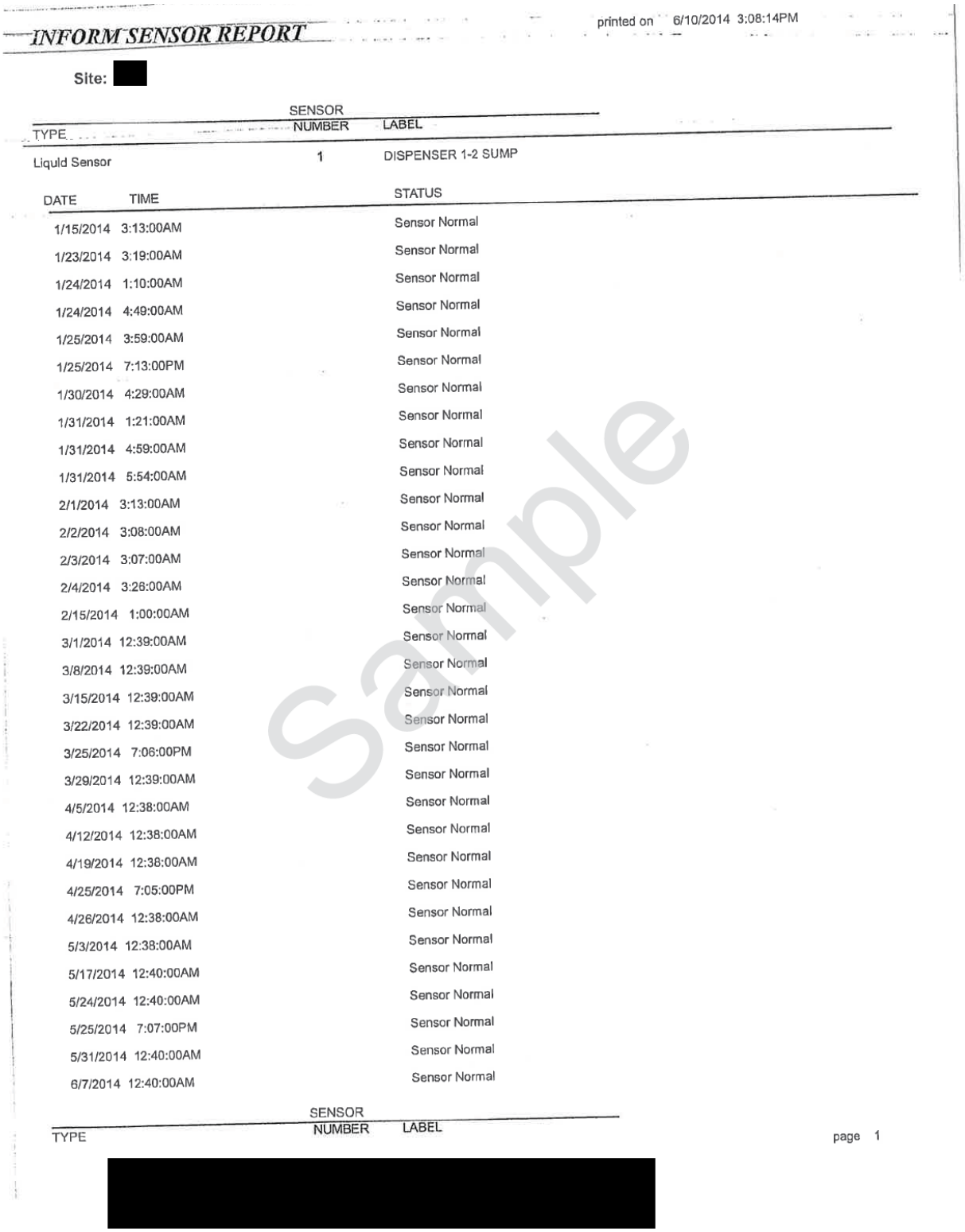
Monitoring Method

Select Your Monitoring Method:	☐ Electronic Sensors ☐ Observation Wells

Vapor Monitoring Well Inspections

Date	**Sensor/ Well 1**	**Sensor/ Well 2**	**Sensor/ Well 3**	**Sensor/ Well 4**	**Sensor/ Well 5**	**Sensor/ Well 6**	**Comments**	**Inspector Initials**

Figure 12. Example of an Interstitial Monitoring Sensor Report



INFORM SENSOR REPORT

printed on 6/10/2014 3:08:14PM

Site: [redacted]

TYPE	SENSOR NUMBER	LABEL
Liquid Sensor	1	DISPENSER 1-2 SUMP

DATE	TIME	STATUS
1/15/2014	3:13:00AM	Sensor Normal
1/23/2014	3:19:00AM	Sensor Normal
1/24/2014	1:10:00AM	Sensor Normal
1/24/2014	4:49:00AM	Sensor Normal
1/25/2014	3:59:00AM	Sensor Normal
1/25/2014	7:13:00PM	Sensor Normal
1/30/2014	4:29:00AM	Sensor Normal
1/31/2014	1:21:00AM	Sensor Normal
1/31/2014	4:59:00AM	Sensor Normal
1/31/2014	5:54:00AM	Sensor Normal
2/1/2014	3:13:00AM	Sensor Normal
2/2/2014	3:08:00AM	Sensor Normal
2/3/2014	3:07:00AM	Sensor Normal
2/4/2014	3:26:00AM	Sensor Normal
2/15/2014	1:00:00AM	Sensor Normal
3/1/2014	12:39:00AM	Sensor Normal
3/8/2014	12:39:00AM	Sensor Normal
3/15/2014	12:39:00AM	Sensor Normal
3/22/2014	12:39:00AM	Sensor Normal
3/25/2014	7:06:00PM	Sensor Normal
3/29/2014	12:39:00AM	Sensor Normal
4/5/2014	12:38:00AM	Sensor Normal
4/12/2014	12:38:00AM	Sensor Normal
4/19/2014	12:38:00AM	Sensor Normal
4/25/2014	7:05:00PM	Sensor Normal
4/26/2014	12:38:00AM	Sensor Normal
5/3/2014	12:38:00AM	Sensor Normal
5/17/2014	12:40:00AM	Sensor Normal
5/24/2014	12:40:00AM	Sensor Normal
5/25/2014	7:07:00PM	Sensor Normal
5/31/2014	12:40:00AM	Sensor Normal
6/7/2014	12:40:00AM	Sensor Normal

TYPE	SENSOR NUMBER	LABEL

page 1

[redacted]

Manual Tank Gauging: Instructions

Test Your Tank Weekly

If you use manual tank gauging as part of your release detection method, test the tank **every week**. You must have enough "quiet time"[19] to use this method.

Know Your Standards

In the table below, mark or highlight your tank's size and the applicable test duration and standards.

Table 3. Manual Tank Gauging Standards

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

Record Your Data

If using our manual tank gauging log sheet, follow the instructions below. If using your own record-keeping method, document the same information.

In the weekly log sheet:

1. For each tank, write its ID number in one of the column headings.
2. Record the date, time, and stick readings for the start and end of each test in the weekly log sheet.
3. Add the 2 initial stick readings together, then divide the total by 2 to get the average.
4. Convert the average to gallons using your tank manufacturer's chart.
5. Repeat steps 1 through 3 for the end-of-test readings.
6. Subtract the final gallons from the initial gallons and record the total under test results. Note whether it is a product excess (+) or loss (-).

If the number is greater than the weekly standard, the tank may have a suspected release and does not pass. Write the initials of the tester and check the applicable response to the "tank passes test?" question.

19. Any time fuel is neither deposited into nor removed from the tank.

In the monthly average log sheet:

1. Write the month and year above a blank table.
2. Write each week's calculated average, in gallons, for each tank.
3. At the end of the month, add the 4 readings together and divide by 4 to get the average. Note whether it is a product excess or loss.

If the number is greater than the monthly standard, the tank may have a suspected release. Write the initials of the tester and check the applicable response to the "tank passes test?" question.

Report Any Suspected Releases

If monitoring shows a suspected release, notify TCEQ **within 24 hours**.

- See Suspected Releases from PSTs[20] (RG-475h) for more information.

Update Every 30 Days and Keep with Records

Update your log sheets after each inspection and keep them in your records for **at least five years** for TCEQ inspections.

20. www.tceq.texas.gov/downloads/assistance/publications/rg-475h-suspected-and-confirmed-releases-from-psts

Manual Tank Gauging: Weekly Log Sheet

Start of Test Record

Data to Record	Tank ID:	Tank ID:	Tank ID:	Tank ID:
Test Start (Date and Time)				
First Stick Reading (inches)				
Second Stick Reading (inches)				
Average of Initial Readings (inches)				
Initial Gallons (Convert from inches)				

End of Test Record (tank IDs continue from above)

Data to Record				
Test End (Date and Time)				
First Stick Reading (inches)				
Second Stick Reading (inches)				
Average of Final Readings (inches)				
Final Gallons (Convert from inches)				

Test Results (tank IDs continue from above)

Data to Record				
Change in Tank Volume (gallons + or -)				
Tester Initials				
Tank Passes Test?	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No

Notes

Manual Tank Gauging: Monthly Average Log Sheet

Month and Year:

Data to Record	Tank ID:	Tank ID:	Tank ID:	Tank ID:
Week 1 Volume Change				
Week 2 Volume Change				
Week 3 Volume Change				
Week 4 Volume Change				
Monthly Average (+ or -)				
Tank Passes Test?	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No

Month and Year:

Data to Record	Tank ID:	Tank ID:	Tank ID:	Tank ID:
Week 1 Volume Change				
Week 2 Volume Change				
Week 3 Volume Change				
Week 4 Volume Change				
Monthly Average (+ or -)				
Tank Passes Test?	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No

Month and Year:

Data to Record	Tank ID:	Tank ID:	Tank ID:	Tank ID:
Week 1 Volume Change				
Week 2 Volume Change				
Week 3 Volume Change				
Week 4 Volume Change				
Monthly Average (+ or -)				
Tank Passes Test?	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No

Notes

30-Day Tank Gauging: Instructions

Test Your Tank Every 30 Days

If you use tank gauging as your release detection method for your **emergency generator tank,**[21] test it **every 30 days**. You must have enough "quiet time"[22] to use this method.

Know Your Standards

In the table below, mark or highlight your tank's size and the applicable test duration and standards.

Table 4. 30-Day Tank Gauging Standards

Tank Size (in gallons)	Minimum Test Duration	Monthly Standard (4-test average)
Up to 550	36 hours	5 gallons
551 to 1000	36 hours	7 gallons
1001 to 2000	36 hours	13 gallons
Over 2000	36 hours	1.0% of the total tank capacity in gallons

Record Your Data

If using our 30-day tank gauging log sheet, use the instructions below. If using your own record-keeping method, document the same information described in our log.

For each test:

1. Record the date, time, and stick readings for the start and end of each test in the weekly log sheet.
2. Add the 2 initial stick readings together, then divide the total by 2 to get the average.
3. Convert the average to gallons using your tank manufacturer's chart.
4. Repeat steps 1 through 3 for the end-of-test readings.
5. Subtract the final gallons from the initial gallons and record the total under test results. Note whether it is a product excess (+) or loss (-).

If the number is greater than the standard, the tank may have a suspected release and does not pass. Write the initials of the tester and check the applicable response to the "tank passes test?" question.

21. You may only use this release detection method for emergency generator tanks.
22. Any time fuel is neither deposited into nor removed from the tank.

Report Any Suspected Releases

If monitoring shows a suspected release, notify TCEQ **within 24 hours**.

- See Suspected Releases from PSTs[23] (RG-475h) for more information.

Update Every 30 Days and Keep with Records

Update your log sheets after each inspection and keep them in your records for **at least five years** for TCEQ inspections.

23. www.tceq.texas.gov/downloads/assistance/publications/rg-475h-suspected-and-confirmed-releases-from-psts

30-Day Tank Gauging: Log Sheet

Start of Test Record

Data to Record	Tank ID:	Tank ID:	Tank ID:	Tank ID:
Test Start (Date and Time)				
First Stick Reading (inches)				
Second Stick Reading (inches)				
Average of Initial Readings (inches)				
Initial Gallons (Convert from inches)				

End of Test Record (tank IDs continue from above)

Data to Record				
Test End (Date and Time)				
First Stick Reading (inches)				
Second Stick Reading (inches)				
Average of Final Readings (inches)				
Final Gallons (Convert from inches)				

Test Results (tank IDs continue from above)

Data to Record				
Change in Tank Volume (gallons + or -)				
Tester Initials				
Tank Passes Test?	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No

Notes

Annual Release Detection Testing and Inspection: Instructions

Inspect and Test Release Detection Equipment

Regardless of your chosen method, inspect and test your release detection equipment **at least once every year**. We have summarized the requirements for each piece of equipment in our annual testing and inspection log sheet on page 69.

Document Your Results

If using our log sheet, write the test date and tester's name in the first table and follow the instructions below. If using your own record-keeping method, document the same information described in our log.

In the equipment inspection summary table, print "N/A" or "not applicable" for items that do not apply to your system. For each test or inspection:

- Write "yes" under "Tested and Inspected" if it operates correctly and meets the other conditions described, or "no" if it does not.
- Write "yes" under "Needs Action?" if the equipment needs any corrective actions, including cleaning, or "no" if it does not.
- Describe any corrective actions taken, if needed.

Update Every Year and Keep with Records

Update your log sheets after each inspection and keep them in your records for **at least five years** for TCEQ inspections.

Notes

Annual Release Detection Testing and Inspection: Log Sheet

Test Date:		Tester Name:		Tester Signature:	

Equipment Test and Inspection Summary

Equipment[h]	Tested and Inspected?	Needs Action?	Corrective Actions Taken (if any are needed)
Automatic tank gauge and other controllers: test the alarm and battery backup and verify the system configuration.			
Probes and sensors: test alarm operability and communication with controller, check for residual buildup, and confirm floats move freely, shaft is not damaged, and cables are free of kinks and breaks.			
Automatic line leak detector: confirm it can detect piping system releases[i] by simulating a leak.			
Vacuum pumps and pressure gauges: confirm they communicate with the sensors and controller.			
Hand-held electronic release detection equipment: confirm it operates properly.			
Groundwater and vapor monitoring equipment: make sure it operates properly.			
Handheld release detection equipment: (e.g., groundwater bailers) make sure it is operable and serviceable.			

h. Include any other release detection equipment in the blank rows of this table.
i. It must be able to detect releases of 3 gallons per hour at 10 pounds per square inch within 1 hour.

Notes

Release Detection Records for Piping

Applicable Regulations: 30 TAC 334.10, 30 TAC 334.50(a), 30 TAC 334.50(b)(2), and 30 TAC 334.50(d)-(e)

Conduct Release Detection Tests

Regularly conduct and pass piping release detection tests using an acceptable method (see Table 5 on page 73). Your record-keeping requirements depend on whether you have a **pressurized** or **suction** piping system.

Install Shear Valves for Pressurized Piping Systems

If you have a pressurized piping system, you must install shear valves. An investigator will visually verify they are installed and **properly anchored**.

Keep Records

If you have a pressurized piping system, **test your automatic line leak detector (LLD) function every year** *and* use at least one of the piping release detection methods in Table 5.

If you have a suction piping system without a high-mounted check valve, use at least one of the methods in Table 5. If your system has a high-mounted check valve, you only need to keep as-built drawings or written documentation from a registered UST contractor to verify.

Keep all records for **at least 5 years**.

Attachments[24]

1. *Table 5. Release Detection Methods for Piping*
2. *Figures 13 and 14. Examples of Automatic Line Leak Detector Test Results*
3. *Figure 15. Example of Piping Tightness Test Results*
4. *Figure 16. Photo of a Properly Anchored Shear Valve*

24. Find more examples and applicable log sheets in the Release Detection Records for Tanks section.

Notes

Table 5. Release Detection Methods for Piping

Release Detection Method	Required Records	Frequency
Piping tightness test	Test results	Pressurized systems: every year Suction systems: every 3 years
Groundwater or vapor monitoring	Logs of dates monitored and any results	Every 30 days
Interstitial monitoring (secondary containment)	Logs of dates monitored and any results	Every 30 days for monitoring logs.
Statistical Inventory with Reconciliation (SIR)[j]	Results from an SIR vendor stating "Pass," "Fail," or "Inconclusive" and inventory control records	Every 30 days
Electronic leak monitoring	Logs of dates monitored and any results	Every 30 days

j. SIR vendors must use a method certified by a third party.

Notes

Figure 13. First Example of a Line Leak Detector Test Report

RJ - LEAK DETECTOR TEST REPORT

Completion of this report is required for all mechanical leak detector testing

Testing Company

Store # [redacted]	[redacted]	Date: 6/3/13
Address: [redacted]	[redacted]	Tech Name: [redacted]
City / State: HOUSTON TX.	[redacted] Tx. 77383-0340	Tech Cert # [redacted]

Test Equipment Used

Make/Model LS-2003

Test Method Used

☐ AVO (RJ21) ☒ FTA (RJ20) ☐ FXT (RJ 051-272-1)

Type of Leak Detectors tested

☐ LDC ☐ XLP ☐ BFLD ☐ DLD ☐ PLD ☐ BFLD ☐ FX1
☐ FX1D ☐ FX2 ☐ FX2D ☐ FX1BFLD ☐ FX2BFLD ☒ FX1DV ☐ FX2DV
☒ FXIV ☐ FX2V ☐ OTHER _____

TEST INFORMATION

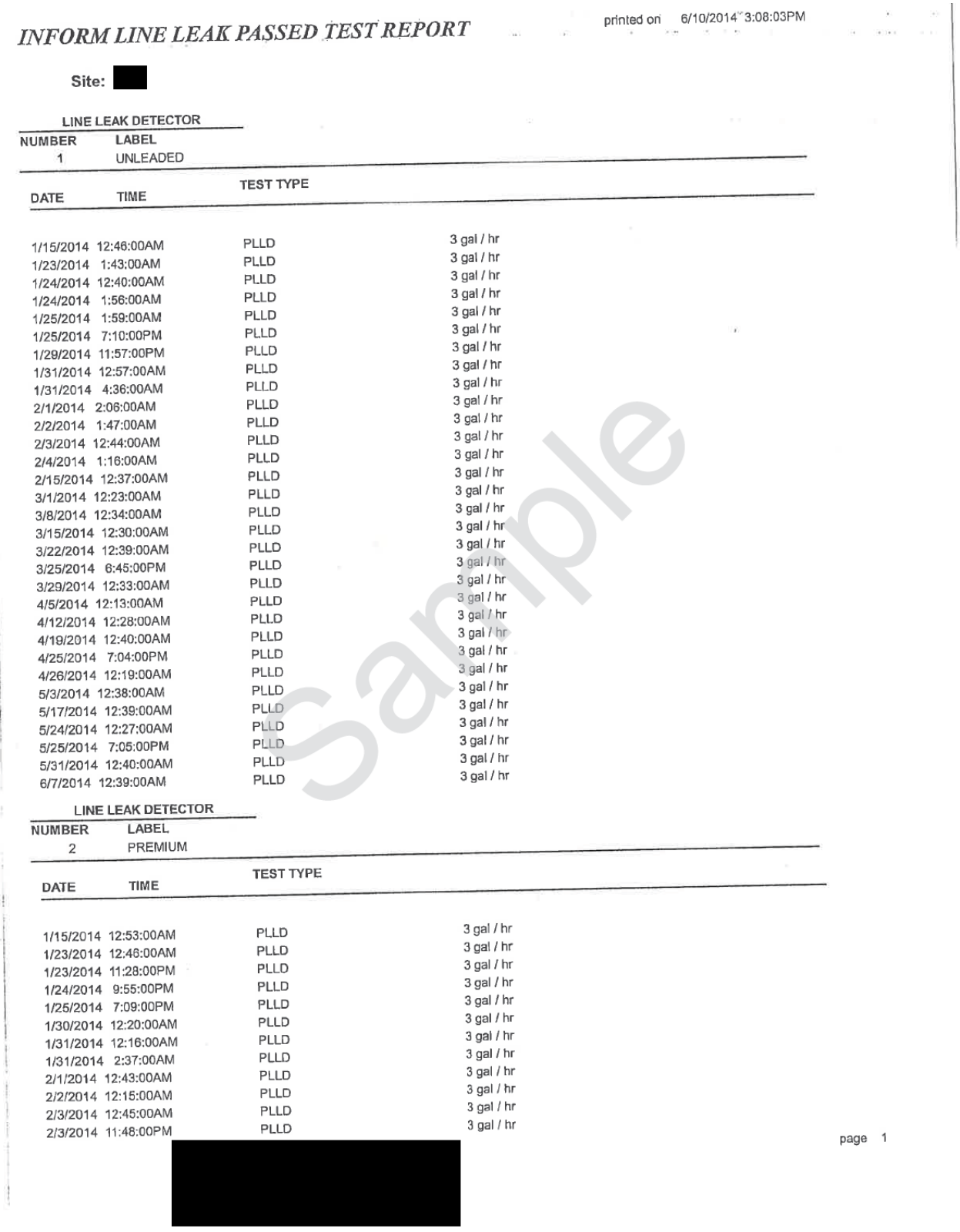
	UL UL+ SU DIE	Leak Detector Type (see above)	Serial Number	Resiliency (ml)	Func. Element (check valve) Holding PSI	Opening Time (sec)	Test Leak Rate ml/min or gal/hr	Metering PSI	Pass or Fail
1	UL	FX1V	8949	116 ML	16	2 SEC	196 ML	10	PASS
2	SU	FX1V	8765	112 ML	18	2 SEC	196 ML	10	PASS
3	D	FX1DV	7766	110 ML	20	2 SEC	196 ML	10	PASS
4									
5									
6									
7									
8									

Technician Signature [redacted] Date: 6/3/13

[redacted]

Notes

Figure 14. Second Example of a Line Leak Detector Test Report



INFORM LINE LEAK PASSED TEST REPORT

printed on 6/10/2014 3:08:03PM

Site: [redacted]

LINE LEAK DETECTOR

NUMBER	LABEL
1	UNLEADED

DATE	TIME	TEST TYPE	
1/15/2014	12:46:00AM	PLLD	3 gal / hr
1/23/2014	1:43:00AM	PLLD	3 gal / hr
1/24/2014	12:40:00AM	PLLD	3 gal / hr
1/24/2014	1:56:00AM	PLLD	3 gal / hr
1/25/2014	1:59:00AM	PLLD	3 gal / hr
1/25/2014	7:10:00PM	PLLD	3 gal / hr
1/29/2014	11:57:00PM	PLLD	3 gal / hr
1/31/2014	12:57:00AM	PLLD	3 gal / hr
1/31/2014	4:36:00AM	PLLD	3 gal / hr
2/1/2014	2:06:00AM	PLLD	3 gal / hr
2/2/2014	1:47:00AM	PLLD	3 gal / hr
2/3/2014	12:44:00AM	PLLD	3 gal / hr
2/4/2014	1:16:00AM	PLLD	3 gal / hr
2/15/2014	12:37:00AM	PLLD	3 gal / hr
3/1/2014	12:23:00AM	PLLD	3 gal / hr
3/8/2014	12:34:00AM	PLLD	3 gal / hr
3/15/2014	12:30:00AM	PLLD	3 gal / hr
3/22/2014	12:39:00AM	PLLD	3 gal / hr
3/25/2014	6:45:00PM	PLLD	3 gal / hr
3/29/2014	12:33:00AM	PLLD	3 gal / hr
4/5/2014	12:13:00AM	PLLD	3 gal / hr
4/12/2014	12:28:00AM	PLLD	3 gal / hr
4/19/2014	12:40:00AM	PLLD	3 gal / hr
4/25/2014	7:04:00PM	PLLD	3 gal / hr
4/26/2014	12:19:00AM	PLLD	3 gal / hr
5/3/2014	12:38:00AM	PLLD	3 gal / hr
5/17/2014	12:39:00AM	PLLD	3 gal / hr
5/24/2014	12:27:00AM	PLLD	3 gal / hr
5/25/2014	7:05:00PM	PLLD	3 gal / hr
5/31/2014	12:40:00AM	PLLD	3 gal / hr
6/7/2014	12:39:00AM	PLLD	3 gal / hr

LINE LEAK DETECTOR

NUMBER	LABEL
2	PREMIUM

DATE	TIME	TEST TYPE	
1/15/2014	12:53:00AM	PLLD	3 gal / hr
1/23/2014	12:46:00AM	PLLD	3 gal / hr
1/23/2014	11:28:00PM	PLLD	3 gal / hr
1/24/2014	9:55:00PM	PLLD	3 gal / hr
1/25/2014	7:09:00PM	PLLD	3 gal / hr
1/30/2014	12:20:00AM	PLLD	3 gal / hr
1/31/2014	12:16:00AM	PLLD	3 gal / hr
1/31/2014	2:37:00AM	PLLD	3 gal / hr
2/1/2014	12:43:00AM	PLLD	3 gal / hr
2/2/2014	12:15:00AM	PLLD	3 gal / hr
2/3/2014	12:45:00AM	PLLD	3 gal / hr
2/3/2014	11:48:00PM	PLLD	3 gal / hr

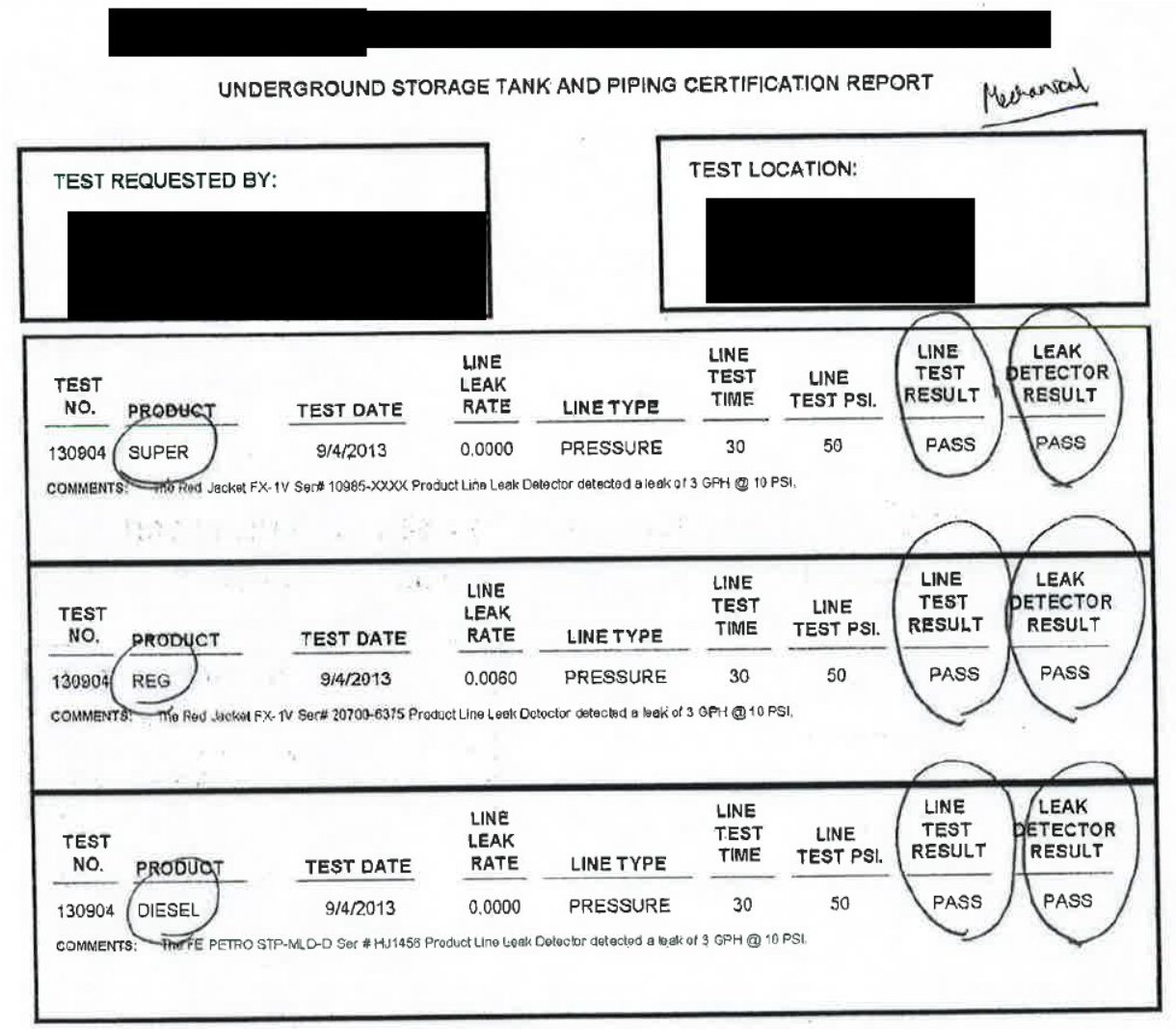
[redacted]

page 1

Sample

Notes

Figure 15. First Example of a Piping Tightness Test Report



[redacted]

UNDERGROUND STORAGE TANK AND PIPING CERTIFICATION REPORT

Mechanical

TEST REQUESTED BY:

[redacted]

TEST LOCATION:

[redacted]

TEST NO.	PRODUCT	TEST DATE	LINE LEAK RATE	LINE TYPE	LINE TEST TIME	LINE TEST PSI.	LINE TEST RESULT	LEAK DETECTOR RESULT
130904	SUPER	9/4/2013	0.0000	PRESSURE	30	50	PASS	PASS

COMMENTS: The Red Jacket FX-1V Ser# 10985-XXXX Product Line Leak Detector detected a leak of 3 GPH @ 10 PSI.

TEST NO.	PRODUCT	TEST DATE	LINE LEAK RATE	LINE TYPE	LINE TEST TIME	LINE TEST PSI.	LINE TEST RESULT	LEAK DETECTOR RESULT
130904	REG	9/4/2013	0.0060	PRESSURE	30	50	PASS	PASS

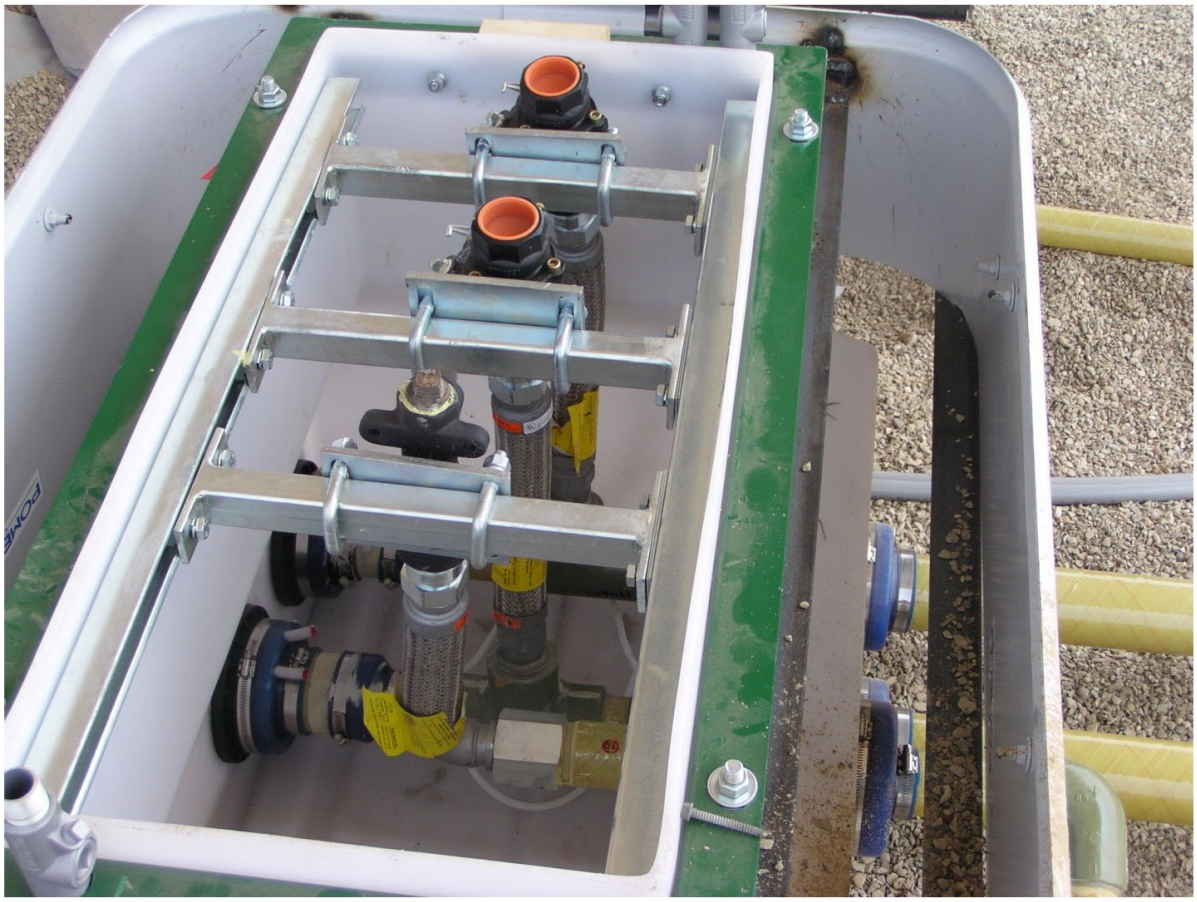
COMMENTS: The Red Jacket FX-1V Ser# 20709-6375 Product Line Leak Detector detected a leak of 3 GPH @ 10 PSI.

TEST NO.	PRODUCT	TEST DATE	LINE LEAK RATE	LINE TYPE	LINE TEST TIME	LINE TEST PSI.	LINE TEST RESULT	LEAK DETECTOR RESULT
130904	DIESEL	9/4/2013	0.0000	PRESSURE	30	50	PASS	PASS

COMMENTS: The FE PETRO STP-MLD-D Ser # HJ1456 Product Line Leak Detector detected a leak of 3 GPH @ 10 PSI.

Notes

Figure 16. Photo of a Properly Anchored Shear Valve



Notes

Spill and Overfill Prevention Records

Applicable Regulations: 30 TAC 334.10, 30 TAC 334.48, and 30 TAC 334.51

Install and Maintain Spill and Overfill Prevention Equipment

To prevent regulated substances releasing to the environment from spills or overfills, install and maintain the following equipment:

- Tight fill fittings to make sure transfers into tanks are liquid tight.
- Liquid-tight spill containment devices around fill tubes.
- Automatic shut-off or flow restriction equipment[25] in case of overfills.

For more information, see our guide to *Preventing PST Spills and Overfills*[26] (RG-475e).

Keep Records

Keep records verifying the type of spill and overfill prevention equipment installed at your facility and any maintenance done. Maintenance includes regular inspections and testing, cleaning, and repairs. See Table 6 on page 85 for more details.

Keep all records for **at least 5 years**.

Attachments

1. *Table 6. Spill and Overfill Prevention Equipment Record Requirements*
2. *30-Day Spill Prevention Inspection Log Sheet and Instructions*
3. *Annual Walkthrough Log Sheet for Containment Sumps and Instructions*
4. *Figure 17. Waste Manifest for Spill Bucket Waste Disposal*

25. Ball float devices cannot be installed or repaired after September 1, 2018.
26. www.tceq.texas.gov/downloads/assistance/publications/rg-475e-petroleum-storage-tank-spill-and-overfill-prevention-and-control

Notes

Table 6. Spill and Overfill Equipment Record Requirements

Type of Equipment	Required Records	Frequency
Spill bucket	Inspection logs and either proof of double-walled construction or tightness test results.	Every 30 days for inspections. Every 3 years for tightness testing.
Containment sumps and manways used for secondary containment	Inspection logs and proof of double-walled construction or tightness test results.	Every 30 days for inspections. Every 3 years for tightness testing.
All containment sumps	Walkthrough inspection logs.	Every year
All spill prevention equipment	Repair records and their test results. Records showing you removed any debris, contaminated water, and fuel within 96 hours of discovery and showing its proper disposal.	Within 30 days of repairs. As needed for cleaning and disposal.
Automatic shutoff device[k]	Installation records, repair records and their test results, and test results showing the device is set to activate at the appropriate level.	Within 30 days of repairs. Every 3 years for activation tests.
Flow restrictor[l]	Test results showing the device is set to activate at the appropriate level and records showing change in service from flow restrictor to automatic shutoff device[m] if replaced.	Every 3 years for activation tests.

k. Find automatic shutoff devices in the fill port.
l. Find flow restrictors in the vent line.
m. Flow restrictors cannot be used if you install or replace overfill equipment on or after September 1, 2018.

Notes

30-Day Spill Prevention Equipment Inspection: Instructions

Inspect Spill Prevention Equipment Every 30 Days

Inspect your spill prevention equipment for liquids, debris, cracks, holes, and fill pipe obstructions **at least once every 30 days**. Make sure the fill cap is secured tightly and to remove any liquid or debris found in the equipment within 96 hours.

- If your UST system only receives fuel deliveries more than 30 days apart, you may check spill prevention equipment before each delivery instead.

Document Your Inspections

If using our spill prevention equipment log sheet, write the inspection date and inspector's name in the first table and follow the instructions below. If using your own record-keeping method, document the same information.

For each spill bucket, write the bucket number above the table then answer the questions in the "Conditions to Check" column. Include the date any repairs or other corrective actions are completed and describe the corrective actions at the bottom of the page.

Update Every Year and Keep with Records

Update your log sheets at least once every 30 days and keep them in your records for **at least five years** for TCEQ inspections.

Notes

30-Day Spill Prevention Equipment Inspection: Log Sheet

Inspection Date:		**Inspector Name:**	

Bucket Number:

Conditions to Check	Response	Date Fixed (if needed)
Is the spill bucket free of any liquid or debris?	☐ Yes ☐ No	
Is the spill bucket free of cracks or holes?	☐ Yes ☐ No	
Is the fill cap secured tightly on the fill pipe?	☐ Yes ☐ No	
If present, was any liquid or debris removed within 96 hours?	☐ Yes ☐ No	
Is the fill pipe free from obstructions?	☐ Yes ☐ No	
Double-walled equipment with interstitial monitoring: is the interstitial area free of leaks?	☐ Yes ☐ No	

Bucket Number:

Conditions to Check	Response	Date Fixed (if needed)
Is the spill bucket free of any liquid or debris?	☐ Yes ☐ No	
Is the spill bucket free of cracks or holes?	☐ Yes ☐ No	
Is the fill cap secured tightly on the fill pipe?	☐ Yes ☐ No	
If present, was any liquid or debris removed within 96 hours?	☐ Yes ☐ No	
Is the fill pipe free from obstructions?	☐ Yes ☐ No	
Double-walled equipment with interstitial monitoring: is the interstitial area free of leaks?	☐ Yes ☐ No	

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

Notes

Annual Sump Inspection: Instructions

Inspect Sumps Every Year

Inspect your sumps for regulated substances, damage, leaks, and releases to the environment **at least once every year**. Make sure cathodic protection is working properly and to remove any liquid or debris found in the equipment within 96 hours.

Document Your Inspections

If using our annual sump inspection log sheet, write the inspection date and inspector's name in the first table and follow the instructions below. If using your own record-keeping method, document the same information described in our log.

For each sump, write the sump number above the table then answer the questions in the "Conditions to Check" column. Include the date any repairs or other corrective actions are completed and describe the corrective actions at the bottom of the page.

Update Every Year and Keep with Records

Update your log sheets at least once every year and keep them in your records for **at least five years** for TCEQ inspections.

Notes

Annual Sump Inspection: Log Sheet

Inspection Date:		**Inspector Name:**	

Sump Number:

Conditions to Check	**Response**	**Date Fixed (if needed)**
Any damage to the sump or equipment?	☐ Yes ☐ No	
Any leaks in the containment area?	☐ Yes ☐ No	
Any releases to the environment?	☐ Yes ☐ No	
Any regulated substances in the sump?	☐ Yes ☐ No	
If present, was any liquid or debris removed within 96 hours?	☐ Yes ☐ No	
Cathodic protection present and working??	☐ Yes ☐ No	

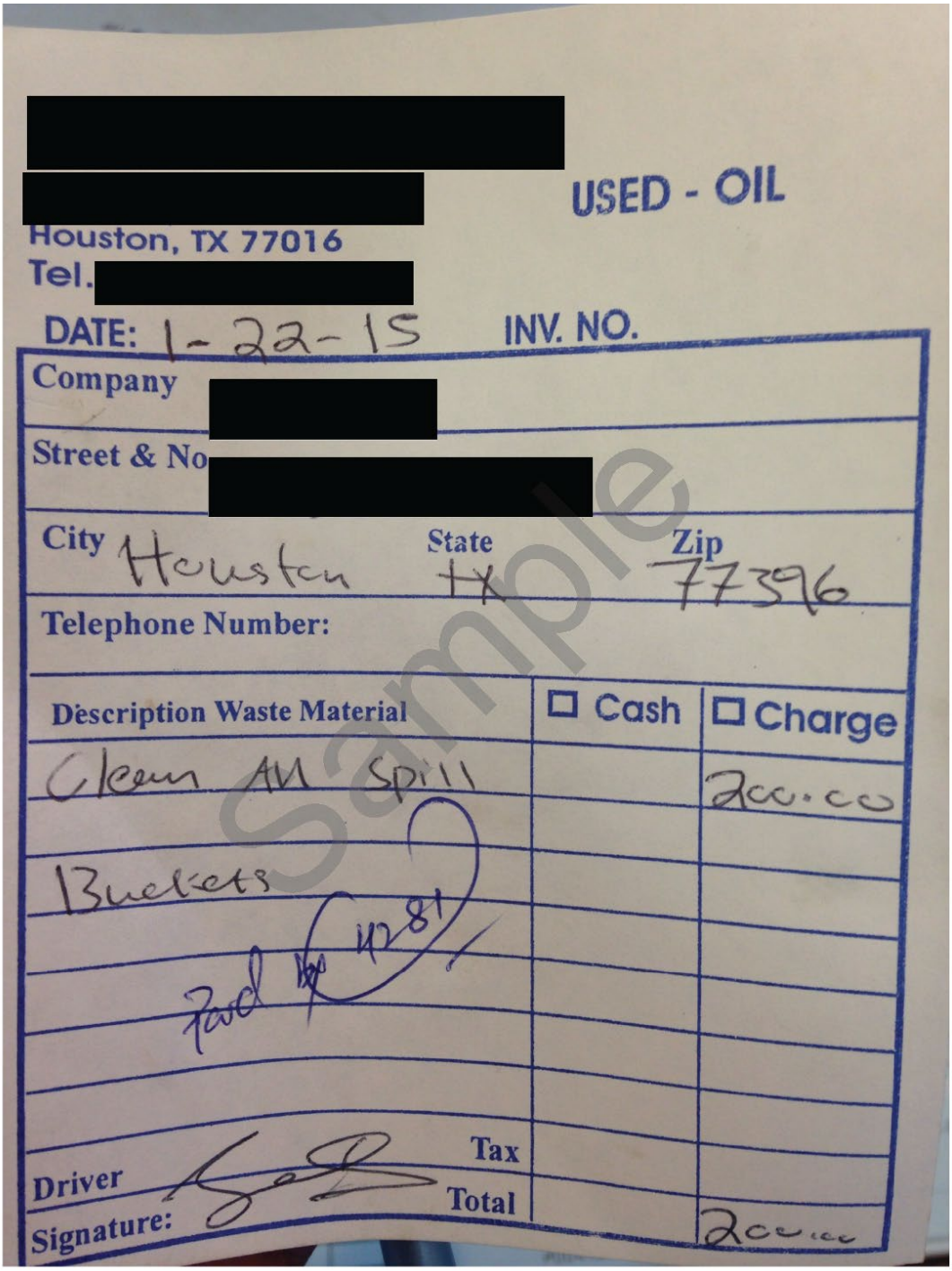
Sump Number:

Conditions to Check	**Response**	**Date Fixed (if needed)**
Any damage to the sump or equipment?	☐ Yes ☐ No	
Any leaks in the containment area?	☐ Yes ☐ No	
Any releases to the environment?	☐ Yes ☐ No	
Any regulated substances in the sump?	☐ Yes ☐ No	
If present, was any liquid or debris removed within 96 hours?	☐ Yes ☐ No	
Cathodic protection present and working?	☐ Yes ☐ No	

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

Notes

Figure 17. Example of a Waste Manifest for Spill Bucket Waste Removal



Notes

Release Reporting Records

Applicable Regulations: 30 TAC 334.10 and 30 TAC 334 Subchapter D

Report Suspected and Confirmed Releases

Report all suspected releases to TCEQ's Remediation Division within 24 hours of discovery. When a release detection method or other information indicates a leak or release may have occurred, report to us by either:

- Sending a completed Incident Report Form[27] (TCEQ-20097) by:
  - Email to pstrpr@tceq.texas.gov
  - Fax to (512) 239-2216
- Calling (512) 239-2200

Include the following information in your initial report:

- Date the suspected release occurred
- Date you became aware of it
- Date you reported it to us
- Results of your investigation
- Date and results of a system tightness test or site check sampling

If you discover contamination, you must take corrective actions. Find more information in our guide to *Suspected Releases from PSTs*[28] (RG-475h).

Keep Records

Your records should show that you:

- Reported suspected releases within 24 hours of discovery.
- Conducted system tightness tests or site checks within 30 days of discovery.
- Submitted Release Determination Reports[29] (TCEQ-00621) to TCEQ's Remediation Division within 45 days of discovery.

Keep records for at **least 5 years**.

27. www.tceq.texas.gov/goto/20097
28. www.tceq.texas.gov/downloads/assistance/publications/rg-475h-suspected-and-confirmed-releases-from-psts
29. www.tceq.texas.gov/goto/00621

Notes

Construction and Maintenance Records

Applicable Regulations: 30 TAC 334.6 and 30 TAC 334.10

Notify TCEQ of Certain Construction Activities

Send completed construction notification forms[30] (TCEQ-00495) to TCEQ when conducting any of the following construction or maintenance activities at your facility:

- Installing tanks or piping
- Removing underground tanks or permanently abandoning them in place
- Returning USTs to service
- Repairing, upgrading, or improving UST systems
- Performing an integrity assessment
- Any activity that requires a person to enter a UST

For more information, see the following modules of our PST Super Guide:

- *Installing a New or Replacement Underground Storage Tank*[31] (RG-475b)
- *Permanently Removing Petroleum Storage Tanks from Service*[32] (RG-475m)

Keep Records

Keep copies of:

- Construction notification forms sent to TCEQ.
- Receipts and invoices for repairs and maintenance, such as securing shear valves.
- Installation records for equipment (such as secondary containment for new components)

If you replaced any part of an existing line with single-walled piping, keep records showing that you replaced no more than 35% of the total original length of that line.

Keep copies of all records for at least **5 years**.

Attachment

1. *Figure 18. Example of a Construction Notification Form Acknowledgment Letter*

30. www.tceq.texas.gov/goto/00495
31. www.tceq.texas.gov/downloads/assistance/publications/rg-475b-installing-a-new-or-replacement-underground-storage-tank
32. www.tceq.texas.gov/downloads/assistance/publications/rg-475m-permanently-removing-petroleum-storage-tanks-from-service

Notes

Figure 18. Example of a Construction Notification Form Acknowledgment Letter

Texas Commission on Environmental Quality
Protecting Texas by Reducing and Preventing Pollution

January 21, 2015

[redacted]

Re: UST INSTALLATION at [redacted] Activity scheduled on 02/15/2015; TCEQ PST Facility No [redacted] Notification Received by TCEQ on 01/20/2015.

Dear Sir:

This letter acknowledges receipt by the Texas Commission on Environmental Quality (TCEQ) of notification for the referenced underground storage tank (UST) construction activity, as required by 30 TAC '334.6.

This letter does not constitute an official approval, permit or endorsement for the referenced activity or for any associated construction methods or equipment. A copy of your notification has been sent to the TCEQ regional office indicated below. The time and scope of this activity must be confirmed with the regional UST personnel 24 to 72 hours before the activity in order to arrange an inspection. Any rescheduling of the proposed construction must be coordinated and/or approved by authorized regional personnel.

Technical requirements which apply to various UST construction activities are included in 30 TAC '334, Subchapter C. **Also, all UST installations, repairs, and removals must be conducted by a registered UST contractor who has a licensed installer or on-site supervisor at the site during all critical junctures, as required by 30 TAC Chapter 334, Subchapter I.**

*This letter also serves as a temporary delivery certificate to allow initial deliveries into any **new or replacement UST system, or the initial delivery into an UST system temporarily out-of-service under '334.54 for the purpose of returning to service.** This **temporary** delivery certificate is valid for no more than 90 days after the first delivery of regulated substances into the new or replacement UST system, after which a permanent TCEQ-issued delivery certificate must be posted or available at the UST facility.*

This action is taken under authority delegated by the Executive Director of the Texas Commission on Environmental Quality.

Upon completion of construction, the attached UST Registration form and Self-Certification form must be completed and returned to the referenced address on the form. For further assistance, please contact the PST Registration & Self-Certification Team, at (512)239-2160, or the TCEQ regional UST personnel indicated below.

Sincerely,

Martha C. Glasgow

Martha Glasgow
Team Leader, PST Registration Team
Permitting & Registration Support Division

Enclosures: TCEQ UST Registration & Self-Certification Form
Regional Representative: Region 13, PST Team, (210)490-3096

Notes

Operator Training Records

Applicable Regulations: 30 TAC 334.10 and 30 TAC 334 Subchapter N

Train Your Operators

You must have at least one trained A, B, and C operator for each UST facility, and one certified operator must be present during hours of operation.

Unmanned UST systems, such as card access fueling stations or emergency generators, must keep weather-resistant signs visible from any dispenser that includes:

- Procedures for addressing a surface spill
- Location of an emergency shutoff button
- A 24-hour contact phone number for the A/B operator
- When to call "911"

Find information in our guide to training for UST operators[33] (RG-475o) and approved UST training courses[34] on our website.

Keep Records

Include copies of:

- Current A/B operator certificate issued by a TCEQ-approved training provider.
- Current list of C operators trained for your facility and the date of their latest training.
- If your facility was determined to be in significant noncompliance, keep documentation of re-training.
- If applicable, documentation that a third-party designated class B operator holds a current A or A/B license and is employed by a registered UST contractor.
    - Include a signed agreement between the A/B operator and facility owner or operator.

Keep all records for **at least 5 years**.

Attachments

1. *Figure 19. Example of Current A/B Operator Training Certificate*
2. *"C" Operator Training Log Sheet*

33. www.tceq.texas.gov/downloads/assistance/publications/rg-475o-training-for-underground-storage-tank-operators
34. www.tceq.texas.gov/goto/ust-training

Notes

Figure 19. Example of Current A/B Operator Training Certificate

Notes

Class C Operator Training Log Instructions

Train On-Site Staff

On-site staff that will regularly interact with the USTs must be trained as Class C UST operators must be trained by a licensed A/B operator.

- Class C operator training only applies to the specific facility it was provided for.

Document Staff Training

Since Class C operators are trained on-site by licensed A/B operators, you must document when each staff member received the training. If using our operator training log sheet, follow the instructions below. If using your own record-keeping method, document the same information described in our log.

Print the name of the trainee, the date they were trained, and the name of the trainer in the log sheet. Have both the trainee and trainer sign next to their names to certify the training is completed.

Update Regularly and Keep with Records

Update your log sheets when new staff are trained and keep them in your records for **at least five years** for TCEQ inspections.

Notes

Class C Operator Training Log Sheet

By signing this document, I acknowledge that I received Class C Operator training by a qualified Class A/B Operator[35] and understand my function as a Class C Operator.[36] I also understand that Class C Operators must be retrained within 3 years of the training date below[37] and this training only applies to the specific facility the training was provided for.

Date	Trainee Name	Trainee Signature	Trainer Name	Trainer Signature

35. As required by 30 TAC 334.
36. As defined in 30 TAC 334.602.
37. See 30 TAC 334.602, 334.603, 334.605.

Notes

Temporarily Out-of-Service UST Records

Applicable Regulations: 30 TAC 334.10 and 30 TAC 334.54

Update the Tank's Registration Status

To update your tank's registration status, submit a PST registration and self-certification application online[38] through STEERs or complete a Registration and Self-Certification form[39] (TCEQ-00724) and send it one of the following ways:

- Fax to: (512) 239-3398
- Mail to:
  Petroleum Storage Tank Registration Team (MC-138)
  Texas Commission on Environmental Quality
  P.O. Box 13087
  Austin, TX 78711-3087

Maintain Your System

For **all** temporarily out-of-service (TOOS) tanks, keep vent lines open and all access points locked and secure, and maintain:

- Corrosion protection (see page 15)
- Operator training (see page 103)
- Financial assurance[40] (see page 11) unless your tank is empty, **and** you conducted a site check.

If your TOOS tanks are **not empty**, you must also maintain:

- Release detection for both the tank and piping (see page 31)

If your TOOS tanks are **empty**[41], keep verification that the tank is empty such as a manifest or invoice.

- See our guide to *Temporarily Removing PSTs from Service*[42] (RG-475l)

Keep Records

Keep all records for **at least 5 years**.

38. www.tceq.texas.gov/goto/steers
39. www.tceq.texas.gov/goto/00724
40. If your tanks are empty and you have completed a site check and performed any necessary corrective actions according to 30 TAC 334.74.
41. Empty means you removed all liquid and no more than 2.5 centimeters of sludge remains.
42. www.tceq.texas.gov/downloads/assistance/publications/rg-475l-temporarily-removing-petroleum-storage-tanks-from-service

Notes

Stage I and Stage II Vapor Recovery Records

Applicable Regulations: 30 TAC 115, Subchapter C and 30 TAC 334.10

Know Your Requirements

You may be required to maintain stage I vapor recovery if your facility dispenses gasoline in certain counties. Stage II vapor recovery is no longer required, and its equipment should already be decommissioned.

- Find more information on stage 1 requirements[43] on our website or review our guide to *Gasoline Stage I and II Vapor Recovery*[44] (RG-475j).
- Find a Stage I Applicability Map[45] on our website.
- Find vapor recovery forms and guidance[46] on our website.

Keep Records

Keep copies of:

- 40 CFR 63 Subpart 6C Initial Notification Reports
  - Find a 6C Initial Notification Report Example[47] on our website.
- 40 CFR 63 Subpart 6C Notifications of Compliance Status
- Verification of monthly gasoline throughput (inventory control records)
  - Submerged fill tube documentation
  - Annual testing records (if applicable)
- Stage II decommissioning notification, test results, and report (if applicable)

Keep all records for **at least 5 years**.

43. www.tceq.texas.gov/assistance/industry/pst/stage-i-vapor-recovery
44. www.tceq.texas.gov/downloads/assistance/publications/rg-475j-gasoline-stage-i-and-ii-vapor-recovery
45. www.tceq.texas.gov/assets/public/implementation/air/vr/TexasStageIProgramMap.pdf
46. www.tceq.texas.gov/airquality/mobilesource/vapor_recovery.html#testing1
47. www.tceq.texas.gov/downloads/assistance/air/neshap/6c-initial-notification-form.docx

Notes

Miscellaneous Facility Records

Applicable Regulations: 30 TAC 334.10

Include Records Not Found Elsewhere

Include important records that do not fit elsewhere in the notebook here, such as:

- Inventory control records (if you do not use it as part of your release detection method).

Keep Records

Keep copies of all records for at least **5 years**.

Notes