



UST Compliance: Region 7 Successes and Challenges

**27th Annual National Tanks Conference & Exposition,
Pittsburgh**

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- Successes and Challenges shown with Region 7 Indian Country UST inspections performed between 4/1/2021 and 3/30/2022
 - Background on EPA UST Performance Measures
 - Technical and Non-Technical Compliance Rates
- Region 7 Compliance Assistance Efforts
 - Monthly Conference Calls
 - Ring Binders
 - Calendars
 - Next steps for FFY 2023



Disclaimer

- The use of organization, company, and product names is for informational purposes only and does not constitute endorsement by U.S. EPA.

Background



Meeting UST Compliance Performance Measures Guide For Inspectors April 2018

This document provides underground storage tank (UST) inspectors with information to use in determining whether facilities meet the UST compliance performance measures. This document will also help inspectors calculate EPA's technical compliance rate. Individual implementing agencies may choose to modify this document to ensure it meets your state's requirements and inspection procedures. The federal UST regulation requires UST owners and operators to comply with several periodic requirements. Examples include spill prevention equipment and containment sumps used for interstitial monitoring of piping are required to be tested at least once every three years. Owners and operators must perform periodic requirements on or before the same day of the period after the previous requirement was performed.

These resources can help inspectors prepare for and conduct inspections.

- Federal UST regulation <https://www.epa.gov/ust/revising-underground-storage-tank-regulations-revisions-existing-requirements-and-new>
- States with updated regulations that incorporate 2015 federal UST regulation <https://www.epa.gov/ust/state-underground-storage-tank-ust-programs#2015update>
- EPA's UST publications <https://www.epa.gov/ust/publications-related-underground-storage-tanks>
- National Work Group On Leak Detection Evaluations' (NWGLDE) *List Of Leak Detection Evaluations For Storage Tank Systems* <http://www.nwglde.org/>
- Underground Storage Tank Technical Compendium about the 2015 UST Regulation – <https://www.epa.gov/ust/underground-storage-tank-ust-technical-compendium-about-2015-ust-regulations>

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- Technical Compliance Rate (TCR) Performance Measures
 - www.epa.gov/ust/technical-compliance-rate-tcr-performance-measures
 - Developed with coordination from the Association of State and Territorial Solid Waste Management Officials



UST Compliance Performance Measures Included In The Technical Compliance Rate

UST-9a. Spill Prevention

Spill prevention is not required for USTs in proper temporary closure or for USTs that never receive deliveries >25 gallons.

Element a: Spill prevention device is present and functional. [280.20(c)(1)(i), 280.21(d)]

Verify that:

- Spill bucket is present.
- Spill bucket does not have any holes or cracks.
- In your judgment, the spill bucket will catch or contain drips or spills when the delivery hose is disconnected from the fill pipe.

Element b: Spill prevention device is tested every 3 years or periodically monitored.

[280.35(a)(1)]

Verify that:

- Spill prevention equipment was tested in last 3 years and passed.
- If spill prevention failed test, it was repaired, retested and passed or replaced, according to a code of practice.
- Records for the last 3 years exist.
- Documentation of double-wall and periodic monitoring, if monitoring integrity of both walls every 30 days instead of testing every 3 years. Records must be maintained for as long as the spill bucket or containment sump is using periodic monitoring of the interstitial space.

UST-9b. Overfill Prevention

Overfill prevention is not required for USTs in proper temporary closure or for USTs that never receive deliveries >25 gallons.

Element a: Overfill prevention device is present and operational. [280.20(c)(1)(ii), 280.21(d)]

- Flapper valve is operational, that is, device is not tampered with or inoperable. [280.20(c)(1)(ii)(A), 280.21(d)]
- High level alarm is operational and audible or visible to delivery driver. [280.20(c)(1)(ii)(B), 280.21(d), 280.20(c)(1)(ii)(B), 280.21(d)]
- Ball float is operational. [280.20(c)(1)(ii)(B), 280.21(d)]

Identify the overfill prevention method used:

- *Flapper valve* automatically shuts off delivery when the tank is 95% full or before fittings on top of the tank are exposed to fuel.
 - Verify presence by installation records, contractor verification, or field observation.
 - Verify the flapper valve has not been tampered with, for example using a stick in the drop tube, to inhibit or modify the shut-off point.
 - Perform a visual observation of flapper valve housing in the fill pipe to look for damage.

Getting into the nuts and bolts of UST systems and inspections



How Region 7 collects the data

Present	Not Damaged	Impair Function	Tested Monitored	Repaired Replaced Retested	Last Test or Monitoring Records	Compliance Rate All Green Get "X"
Green	Green	Red	Green		Green	
Green	Red	Red	Green	Green	Green	
Green	Green	Green	Green		Green	X
Green	Green	Green	Green		Green	X
Green	Green	Green	Green		Green	X
Green	Green	Green	Green		Green	X
Green	Green	Green	Green		Green	X
Number in Compliance						6
Number of Completed Inspections						8
Percent in Compliance						75%

- Column headings correspond to TCR criteria
- Color coding
 - Green - Compliant
 - Red - Noncompliant
- Compliance rate determined for facilities having all greens



Work repeated for remaining TCR and Non-TCR Rates

- TCR
 - UST-9b. Overfill Prevention
 - UST-9c. Corrosion Protection
 - UST-9d. Release Detection
 - UST-9e. Combined Measure
- Non-TCR
 - UST-10. Operator Training
 - UST-11. Financial Responsibility
 - UST-12. Walkthrough Inspections

Successes and Challenges



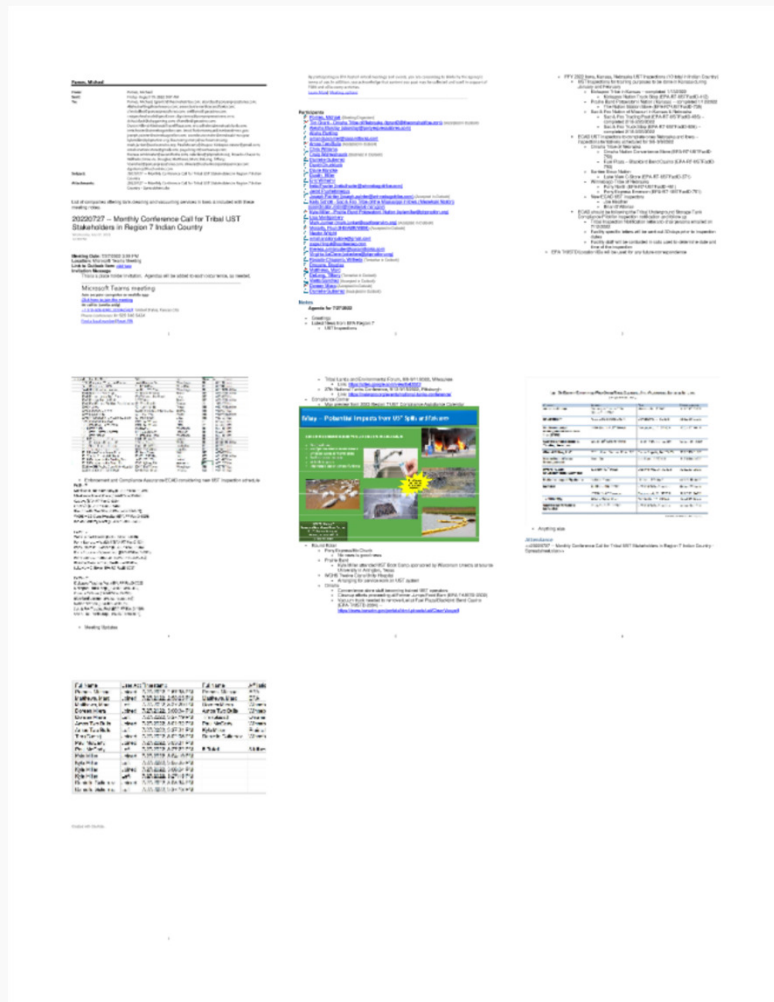
UST inspections from 4/1/2021 to 3/31/2022

- Successes – 75%
 - UST-9a. Spill Prevention
 - UST-9c. Corrosion Protection
 - UST-10. Operator Training
- Moderate – 50% to 63%
 - UST-9b. Overfill Prevention
 - UST-11. Financial Responsibility
 - UST-12. Walkthrough Inspections
- Needs improvement – 38% and below
 - UST-9d. Release Detection
 - UST-9e. Combined Measure

Compliance Assistance Efforts



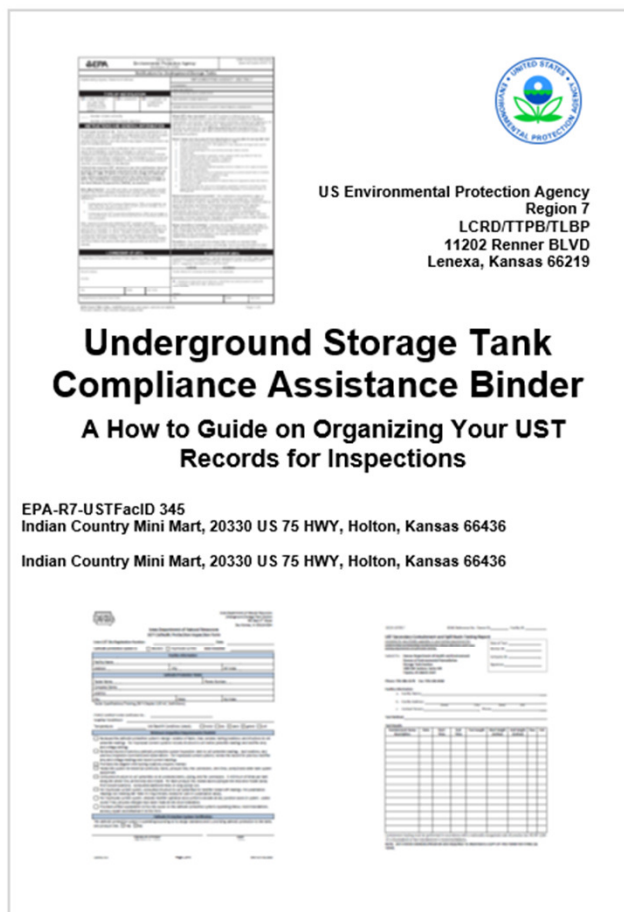
Monthly Conference Calls



Agenda for 8/25/2022

- Greetings
- Latest News from EPA Region 7
 - FFY 2022 UST Inspections
 - Meeting Updates
- Compliance Corner
 - Preview of 2023 Region 7 UST Compliance Assistance Calendar
 - Group Exercise - How do I prepare for my upcoming UST inspection?
- Round Robin
- Anything else?

Ring Binder



US Environmental Protection Agency
Region 7
LCRD/TPB/TLBP
11202 Renner BLVD
Lenexa, Kansas 66219

**Undergraduate Storage Tank
Compliance Assistance Binder**
A How to Guide on Organizing Your UST
Records for Inspections

EPA-R7-USTFacID 345
Indian Country Mini Mart, 20330 US 75 HWY, Holton, Kansas 66436
Indian Country Mini Mart, 20330 US 75 HWY, Holton, Kansas 66436

Introduction

Owners and operators of facilities with USTs have many things to track. Maintaining records associated with your UST system is a task that can prove to be difficult. EPA Region 7 has developed a Compliance Binder containing tabs for you to organize and store your UST records. Many of these records will be reviewed by the UST inspectors.

Each binder tab contains a list of documents that can be stored in that section of the binders. Thumbnails of UST compliance or testing forms also appear on each tab to provide examples of the documentation to be stored in that section. Please note that EPA Region 7 will accept UST compliance information that is submitted on state-generated compliance forms.

Other tabs will hold space for additional compliance assistance materials made available by EPA Region 7. These materials include database printouts showing UST equipment installed at your facility, emergency response information, and information about the EPA Region 7 Undergraduate Storage Tank and Leaking Undergraduate Storage Tank programs. EPA Region 7 encourages the use of this binder for easy recordkeeping and to facilitate the inspection and your facility.

Table Showing Tab Numbers and Contents

Tab Number	Title
1	UST Notification and Compliance Documents
2	Financial Responsibility (Insurance) Documents
3	UST Operator Training Documents
4	Triennial Testing Documents
5	Corrosion Protection Documents
6	Piping Release Detection Documents
7	Tank Release Detection Documents
8	Inventory Control
9	Walkthrough Inspections
10	Database Printouts
11	Emergency Response Documents
12	EPA Region 7 UST Program Information
13	EPA Region 7 LUST Program Information



Ring Binder included database printout

Tanks for Indian Country Mini Mart	
Indian Country Mini Mart	
20330 US 75 Hwy	
Tribe: _____	
Financial Responsibility: Insurance Policy	Indian Country: <input checked="" type="checkbox"/> Facility_ID 345
Coverage: Cleanup <input type="checkbox"/> Third Party <input type="checkbox"/> First Dollar <input type="checkbox"/>	Holton, KS
Amount: Occurrence _____ Aggregate _____	County: Jackson
Tank Number: 1	Expiration Date: _____
Capacity: 6,000	Tank Status: Currently In Use
Tank Construction: Single Wall FRP	Tank Status Date: _____
Special Configuration: _____	Substance Stored: Dyed Diesel
Explanation: _____	Tank Install Date: 1/1/2007
Tank Corrosion Protection: Nonmetallic	CP Install Date: 1/1/2007
CP Repair/Upgrade Date: _____	CP Test/Internal Inspection Date: _____
Line Construction: Flexible DW Nonmetallic	Fuel Delivery: Pressurized
Line Corrosion Protection: Nonmetallic	Line CP Test Date: _____
Line/Dispenser Upgrade: _____	Line/Dispenser Upgrade Date: _____
Spill Bucket: <input checked="" type="checkbox"/> Double Walled <input type="checkbox"/> Drop Tube: <input checked="" type="checkbox"/>	
Triennial Spill Bucket Test Date: _____ Give last date checked if Double Walled	
Type of Overfill: Ball Float Valve	2nd Type of Overfill: _____
Triennial Overfill Test Date: _____	
Tank Release Detection: Automatic Tank Gauge	Tank RD Model/Manu: _____
Annual Operability Test Date: _____	
2nd Release Detection: _____	2nd Tank RD Model/Manu: _____
Annual Annular Sensor Test Date: _____	
Line Release Detection: Tightness Test	Line RD Model Manu: _____
2nd Line Release Detection: _____	2nd Line RD Model Manu: _____
Line TT Date: _____	PLRD Function Test Date: _____
Pressure Lines RD: Mechanical Leak Detector	PLRD Model/Manu: Red Jacket FX1DV
STP Sump: Uncontained Sump Sensor: <input type="checkbox"/>	STP Sump Flexes: Booted
Triennial STP Sump Test Date: _____	Annual STP Sump Sensor Test Date: _____
Underneath Dispensers: Uncontained Sump Sensor: <input type="checkbox"/>	Underneath Dispensers Flexes: Booted
Triennial UDC Test Date: _____	Annual UDC Sensor Test Date: _____
Last Annual Walkthrough Insp Date: _____	Last Monthly Walkthrough Inspection Date: _____
Class A Operator Name: _____	Class A Certification Number: _____
Class A Trainer: _____	Class A Training Date: _____ Class A State: _____
Class B Operator Name: _____	Class B Certification Number: _____
Class B Trainer: _____	Class B Training Date: _____ Class B State: _____
Class C Operator Name: _____	Class C Certification Number: _____
Class C Trainer: _____	Class C Training Date: _____ Class C State: _____

Thursday, July 2, 2020

Page 1 of 1

Compliance Assistance Calendar

EPA
United States Environmental Protection Agency

Region 7
Musts for USTs
Compliance Assistance Calendar

Image credits:
MVI Field Services (inspector), Highland Tank & Manufacturing Company (steel tanks), OPW (fill sump).

EPA
United States Environmental Protection Agency

Region 7
Musts for USTs
2022 Compliance Assistance Calendar

Image credits:
MVI Field Services (inspector), Highland Tank & Manufacturing Company (steel tanks), OPW (fill sump).

Printed on Recycled Paper

Different aspect of UST operation covered each month

April – Underground Storage Tanks and Floods



If a flood is coming, consider...

- Turn off the electrical supply to the tanks.
- Fill the tanks to weigh them down.
- Take inventory readings to assist with evaluating potential loss after the event.
- Seal ALL openings to the tank systems.
- Place weight (sandbags, rock-filled containers, etc.) on top of tanks.

Watch the weather!
Take pre-emptive actions!



USEPA, Region 7
Tanks and Lead-Based Paint Section
11201 Renner Boulevard
Lenexa, Kansas 66219
1-800-223-0425

USEPA, UST Flood Guidance
www.epa.gov/sites/default/files/2014-03/documents/ustfloodguide.pdf

Post-flood, consider...

- Make sure the electricity supply to the tanks is off.
- Verify if product was released or foreign materials (water, debris, etc.) entered the tank systems.
- Verify safety/integrity of electrical supply to the tanks.
- Turn on the power and check the operational status of all the tank systems.
- Clean and empty spill buckets and sumps.
- Perform tightness/integrity test on all tank systems/equipment.
- Test cathodic protection systems.



Walkthrough Inspection sheets included as tear-outs

EPA Region 7 30-Day Walkthrough Inspection Checklist

US Environmental Protection Agency
Region 7
LCRD/TPPB/TLBP
11201 Renner BLVD
Lenexa, Kansas 66219

This form can hold information for up to four USTs. Make additional copies of this form if you have more than four USTs at your facility. 30-Day Walkthrough Inspections Checklists must be kept at least one year after the last inspection date on the form.

This inspection is to be completed by a person with knowledge of the UST system. (Examples: trained A/B Operator or a trusted petroleum service technician). 30-Day Walkthrough Inspections must be conducted every 30 days. If problems are found during the walkthrough inspection, the person conducting the inspection must take action quickly to resolve these problems and avoid serious releases.

EPA-R7-USTFacID _____ Date of inspection _____

Facility Name _____

Facility Address _____

Facility City _____ Facility State _____ Facility Zip Code _____

Identify tank or compartment by providing number, capacity in gallons, and contents	Tank or compartment number:	Capacity, in gallons:	Contents:				

Release Detection Equipment

Is the release detection equipment operating? Yes No NA

Are any release detection alarms sounding or flashing? Yes No NA

Is there anything unusual happening with the operation of the release detection equipment? Yes No NA

Release Detection Records

Do the release detection records indicate a passing result? Yes No NA

Are the release detection records current? Yes No NA

Spill Containment Area

Is the spill bucket in good condition - free of cracks, holes, bulges, or other defects? Yes No NA

Does the test gauge result show no failure for double-walled spill buckets monitored using vacuum, pressure, or brine-filled interstices? Yes No NA

Is the spill bucket free of product, water, or debris? Yes No NA

Is the fill cap undamaged and does it fit securely on the fill pipe? Yes No NA

Is the fill pipe free of any obstructions that affect fuel delivery? Yes No NA

*Note removal of product, water, or debris in UST System Maintenance Record on page 2.

EPA Region 7 Annual Walkthrough Inspection Checklist

US Environmental Protection Agency
Region 7
LCRD/TPPB/TLBP
11201 Renner BLVD
Lenexa, Kansas 66219

Annual Walkthrough Inspections must be conducted every twelve months (not to exceed 365 days after previous inspection date). You must keep records of Annual Walkthrough Inspections including any issues identified and corrective actions taken for at least one year. This form can hold information for documenting an UST walkthrough inspection for as many as four USTs. Make additional copies of this form if you have more than four USTs at your facility.

Owners may want to have this inspection is to be completed by a person with knowledge of the UST system. (Examples: trained A/B Operator or a trusted petroleum service technician). If problems are found during the walkthrough inspection, the person conducting the inspection must take action quickly to resolve these problems and avoid serious releases.

EPA-R7-USTFacID _____ Date of inspection _____

Facility Name _____

Facility Address _____

Facility City _____ Facility State _____ Facility Zip Code _____

Hand-Held Release Detection Equipment

Tank Gauge Measuring Stick

Are the numbers legible and is the bottom button in good condition? Yes No NA

Identify tank or compartment by providing number, capacity in gallons, and contents	Tank or Compartment no.	Capacity, in gallons:	Product:				

Tank Release Detection Equipment (Give date of last Operability Check/Recertification: / /)

Is release detection equipment operating without alarms or other unusual operating conditions? Yes No NA

Has the release detection equipment passed the last operability check/recertification done in the last 12 months? Yes No NA

Tank Submersible Turbine Pump (STP) Sumps

Are there any debris in the bottom of the STP sump? Yes No NA

Is there any liquid or product in the bottom of the STP sump? Yes No NA

Are the walls of the STP sump undamaged with no apparent areas where product could get out of the sump? Yes No NA

*Note any corrective actions in the UST System Maintenance Record on page 2.



Space provided to note compliance testing dates

2022		FEBRUARY			Important Compliance Dates:	
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
30	31	01	02	03	04	05
06	07	08	09	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	01	02	03	04	05
06	07	08	09	10	11	12



Next Steps for FFY 2023

- Individual Facility Calls
- Monthly Conference Calls
- 2023 Calendar
- In-person Compliance Assistance Visits

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