

# Compare Results

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**21 pages (419 KB)**  
9/23/2015 4:48:00 PM

versus

New File:

**Standardized Inspection Process draft rev 2 20210119\_i\_noblueline.pdf**

**23 pages (1.00 MB)**  
1/19/2021 11:20:03 AM

## Total Changes

**332**

Text only comparison

## Content

**250** Replacements  
**67** Insertions  
**15** Deletions

## Styling and Annotations

**0** Styling  
**0** Annotations

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# Operational Compliance Inspection Process

## Standardized Inspection Manual

Tennessee Department of Environment & Conservation

Division of Underground Storage Tanks

Rules Effective October 13, 2018

Document Last Edited: 1/19/2021

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## 1. DISCLAIMER

This document is guidance only and does not affect legal rights or obligations. Agency decisions in any specific case will be made applying applicable laws and regulations to the site-specific facts. Mention of trade names or commercial products does not constitute an endorsement or recommendation for use.

## 2. STANDARDIZED OPERATIONAL COMPLIANCE INSPECTION PROCEDURE

The inspection provides an opportunity to educate and assist tank owners with maintaining compliance with the underground storage tank program.

The following information is provided as an outline of the steps to follow to set up and complete the inspection. It is not intended to be a stand-alone document. It is supported by the general requirements outlined in the "Preparing for an Inspection" Policy and all the Technical Chapters. The Technical Chapters contain the details for each item to be inspected and the records required. All correspondence, records, etc., shall be tracked in the Compliance Database when received or issued in accordance with the Compliance Tracking Instructions included in the Compliance Manual.

## 3. PREPARE FOR INSPECTION

### a. The Energy Policy Act of 2005

The Energy Policy Act of 2005 requires that each facility be inspected at least once every three (3) years. The three (3) year list of facilities to be inspected is query contained in GasLog. Review the list and select facilities to be inspected using the first year for the appropriate region. Depending upon resource allocations inspections may be assigned outside of traditional Environmental Field Office boundaries. Inspections can be coordinated based on proximity, owner/operator (O/O), etc. Inspectors should consider all reasonable requests from the O/O to schedule inspections if it will not interfere with the scheduled inspection cycle or generated list.

### b. Review the Notification Database

Review the Notification database and determine if existing O/O and facility information is correct and complete. Confirm compartment and piping release detection method in addition to the asterisk items. The information should be updated in the Inspector Amendment page of the UST Notification System-UST Admin application. You may submit any necessary changes prior to creating and scheduling the inspection in the Mobile Inspection Application (MIA) in order to avoid duplicating efforts once the inspection is created. Ensure that compartment changes are saved on each page prior to navigating to the next compartment. You must enter your name and submit changes to complete the notification database updates.

**Changes made to the release detection method can have an impact on B Operator Training, requiring retraining or may create a violation in the Mobile Inspection Application (MIA) if Tank Helper is not updated by the B operator.**

Ownership and address changes must be verified by the Notification Section. Always ensure you carry blank copies of the following forms with you on an inspection: CN-1260 Notification of Underground Storage Tanks, CN-1383 Change of Owner Mailing Address, Amended Notification, CN-0911 Seller Reporting Change of Ownership of Tanks, CN-1392 Buyer's Notification and CN-1186 Notification of Indicia of Ownership.

#### **c. Review the Compliance And Case Tracking Database**

Review the Compliance and Case tracking database for past inspection(s) documentation and release history. Review the Tank Helper database to determine if the O/O has designated A and B operators. If not, include reminder variable in FO-030 scheduling letter using the inspection application. Check the delivery prohibition list on the UST website to determine if the facility is on the list. If a facility is on the list, it should already be red tagged. If the compliance database does not indicate the tanks have been red tagged, contact the Notification Section or the Enforcement Case Manager for further instruction. If the inspection database indicates an enforcement case is active/pending, contact the Enforcement Section case manager to determine if the inspection should be a follow-up to be forwarded to the Enforcement Section case manager or if the inspection should be postponed.

#### **d. Review the Facility File**

Review the facility file for the previous inspection and determine if any reported releases or ongoing release investigations have occurred. If an ongoing release investigation/corrective action is identified, notify the contamination case manager of the pending inspection. The discovery of a release during the inspection may be handled differently with an ongoing release investigation/corrective action case. The case manager may also want to attend the inspection as well. There could be wells present for the investigation/cleanup that are not for release detection (RD) purposes.

#### **e. Schedule the Inspection in Advance**

Personally, contact the O/O **by phone** to schedule the inspection. While scheduling the inspection, confirm the correct O/O and mailing address. If an ownership change or change in mailing address is discovered, send a Notification for Underground Storage Tanks Form to the new owner and, if required, a Sellers form to the registered owner. During the phone call, ensure that the O/O or a duly authorized representative (DAR) who has knowledge of the UST system and its operation will be on site during the inspection and is able to open all manways, dispenser covers and provide print off information as designated below. Obtain alternate phone number of the representative to be present. If unable to reach by phone, indicate in the scheduling memo (written confirmation by email can replace the memo and go to next item).

**Note:** In the event a RP is unable to comply with the Division's 3-year inspection cycle as required by EPA, inspectors should discuss the matter with their immediate supervisor and consult the DDFO for further instructions.

#### **f. Confirm Inspection Date and Time**

Complete the scheduling memo or print e-mail confirming inspection date and time for the inspection file. Create a new inspection in GasLog and populate all fields that are not related to the onsite inspection in accordance with the instructions in GasLog.

#### **g. Generate the FO-030 Form Letter**

Generate the FO-030 form letter in the GasLog mail merge function and issue letter (with checklist) confirming inspection. The letter should be addressed to the owner of record in the Notification database. If the letter is refused or returned unclaimed, then contact the O/O for an accurate address. If the O/O has not designated an A and B operator, include the reminder variable in scheduling letter. Track all correspondence in GasLog. Upload inspection documents as a packet under the last event in GasLog tracking and use the following example for the file naming convention: 9999999 OI # Inspection Packet MM-DD-YYYY (date used is the inspection date).

#### **h. Reserve a Vehicle**

Reserve a vehicle in accordance with the standard operating procedure for your field office.

### **4. Day of Inspection.**

- Gather equipment (refer to "Preparing for an Inspection" document) including assigned tablet.
- Gather paperwork including any voluntarily previously submitted records including UST Operational Inspection Form (applicable schedules) if no signal is anticipated at the facility and UST database facility report.
- Get vehicle.
- Confirm directions to location (i.e. Google, Yahoo).
- Notify facility O/O upon arrival. If applicable, sign visitor log to indicate presence (do not sign waiver, see appendix). If no representative is present, call provided alternate number or consult onsite employee. If no onsite contact available, return to office and issue appropriate FO-036 NS form letter.
- Enter inspection details in UST GasLog or if no signal available, use the Operational Inspection Form (applicable schedules) for all appropriate sections and indicate "N/A" if not applicable.
- Verify name of facility, address and ID#.
- Verify owner name and address.
- Ask to see the designated C operator sign or instruction manual (not required for unattended facility if a Class B operator is also trained for Class C and will respond to



emergencies and alarms). If not available, then include as a violation in Results of Inspection letter.

- latitude/longitude coordinates in GasLog at the tank system prior to or upon completing inspection using the "Get My Location" feature:
- Indicate if UST regulated unregistered tank discovered, have O/O complete notification form and O/O sign. Add unregistered tank finding to Results of Inspection letter citing statute language and refer to enforcement.
- If the facility has been red tagged but not authorized to remove, determine if red tags are still in place. If red tags have been removed, make photos of fill ports and indicate if facility is in operation, collect all applicable information including photos of delivery tickets, record product levels, and forward a copy of the inspection report to the Notification Section.

## 5. Records Review.

Records will be reviewed the day of inspection (if O/O prefers to submit records prior to inspection,) electronic submittals are acceptable. If printed copies are submitted by mail, then the inspector will copy the documents using TDEC's equipment and return the records submitted unless the O/O has indicated they are copies not to be returned. Ensure the records clearly identify with the facility information. Complete applicable records section for each UST system in GasLog. If an inspection is scheduled by the Division in advance of the date of that inspection, all records shall be present and available for review during the scheduled inspection.

### a. Release Detection (RD) Records.

Refer to applicable Technical Chapter or the O/O checklist). If a release identified by RD method, complete the applicable section in GasLog and notify case manager. If not notified of suspected release, issue form letter FO-038a, Suspected Release-Unreported. In accordance with rule 0400-18-01-.04(5), all release detection methods must have had a third-party evaluation and be listed on the National Work Group on Leak Detection Evaluations (NWGLDE) website. Any NWGLDE listed leak detection equipment or method for which there is no longer any technical support available may not be used to meet the requirements.

In accordance with .02(8), for all UST systems installed on or after October 13, 2018, a monthly walkthrough form must be completed which documents inspection of release detection equipment to ensure proper operation with no alarms or other unusual operating conditions; and ensure records of release detection testing are reviewed and current. All other UST systems must comply with the monthly walkthrough inspection form by October 13, 2021. Also, in accordance with .02(8), for all UST systems installed on or after October 13, 2018, an annual walkthrough form must be completed which documents inspection of sumps and handheld release detection equipment. All other UST systems must comply with the annual walkthrough inspection form by October 13, 2021.

## 1. Statistical Inventory Reconciliation (SIR)

Do records provide the following information (see Technical Chapter 3.3)?

- Summary page with monthly results indicating pass, fail or inconclusive
- SIR Vendor
- SIR Method (if Continuous In-Tank Leak Detection System (CITLDS), refer to section iii. below) (Must be listed by NWGLDE)
- Method meets tank size and flow-through criteria as noted in the third-party certification (NWGLDE)
- A calculated leak rate not greater than 0.10 gallons per hour
- Inventory (raw) data available for last twelve months which shows:
  - Water checked monthly and recorded
  - Petroleum levels are measured to the nearest 1/8th of an inch
  - Raw data set covers thirty days (If not, refer to SIR Technical Chapter 3.3)
  - Meters calibrated annually
  - Last twelve months of records available
  - Record test results in GasLog Mobile Inspection Application (MIA)

## 2. Automatic Tank Gauging (ATG)

Do records provide the following information (see Technical Chapter 3.2)?

- Facility information
- Manufacturer name and model #
- Type of test (static, continuous, if Continuous In-Tank Leak Detection System (CITLDS), refer to section iii. below)
- Evaluate tank capacity limitations
- Last twelve months of ATG records are available
- Test measures to at least 0.2 gph monthly
- Record test results in GasLog MIA
- Alarm histories are only required to be provided if records for two (2) or more months are either missing or have invalid/fail test results. However, if the O/O provides the information voluntarily and an alarm is indicated, evaluate the reason for alarm to determine if additional review is needed (i.e. probe out)
- Test meets third-party certification requirements
- Annual ATG Test Report is available for review (beginning October 13, 2021 the last three test reports should be available for inspection).

### 3. Continuous In-Tank Leak Detection System (CITLDS)

Do records provide the following information?

- Summary page with monthly results including facility information
- CITLDS Vendor
- CITLDS Method
- Summary of monthly product throughput to ensure method is in accordance with the NWGLDE listing
- Tank capacity limitations
- Last twelve months of records available
- Manufacturer name and model # of ATG
- Test measures to at least 0.2 gph monthly
- Record test results in GasLog MIA

### 4. Interstitial Monitoring

(Tanks and piping are listed separately in Technical Chapter 3.4 in order to address situations in which interstitial monitoring (IM) is used on only tanks or only piping. Ensure records provide the following information and are submitted on the standardized forms (unless an alternative form that contains the same information as recorded on the standardized form is pre-approved by the Division):

All tanks and pressurized piping installed or replaced after 7/24/07 shall be secondarily contained with IM, however IM may be used for older tanks and piping as follows:

- Monitoring of interstitial space –electronic only (manual or visual monitoring is no longer allowed if IM is the RD method selected for systems installed prior to 7/24/07)
- Type of monitoring device (liquid, pressure, discriminating)
- Monitoring device is certified by third-party (on NWGLDE list)
- Last twelve months of sensor status reports available
- Last twelve months of alarm history reports available
- Record test results in GasLog MIA

### 5. Manual Tank Gauging (MTG)

Do records provide the following information?

- Tank size and diameter verified by O/O
- The method applicable for the tank size (less than or equal to 2,000 gal.) and tank age (In Tennessee, any tank installed on or after July 24, 2007 is required to perform interstitial monitoring; therefore, the combination of manual tank gauging and tank tightness testing is no longer allowed. Based on the tank size (including test duration and diameter) in Table 1 of the MTG Technical Chapter 3.1, a tightness test was

required and conducted

- The time interval between stick readings is appropriate for tank size
- Tank liquid level measurements taken at beginning and end of appropriate duration of test
- Level measurements are based on two consecutive stick readings at both the beginning and ending of required test duration
- Petroleum levels are measured to the nearest 1/8th inch and measurements recorded to the nearest 1/8th inch
- Last twelve months of records available
- Record test results in GasLog MIA

## 6. Tank Tightness Testing

If tank tightness test required for release detection (only applicable to MTG) or a suspected release investigation, identify the following:

- Complete tank tightness test includes testing of ullage space
- Tank tightness test was performed within the last five (5) years if conducted in conjunction with manual tank gauging
- The report format should include information outlined in Technical Chapter 3.7

## 7. Pressurized piping

Identify the following: [requires one catastrophic **and** one periodic option (see Technical Chapter 3.5)]

a. Catastrophic (automatic line leak detector):

i. Mechanical Line Leak Detector

Annual line leak detector test (must meet 3.0 gph at 10 pounds per square inch (psi) or equivalent leak rate, not just pass/fail results. If leak detector does not pass, it must be replaced) Results from last three annual line leak detector tests should be provided for inspection., or

ii. Electronic line leak detector

Annual line leak detector test (must meet 3.0 gph at 10 psi or equivalent leak rate, not just pass/fail results. If a leak detector does not pass, it must be replaced); Results from last three annual line leak detector tests should be provided for inspection.

b. Periodic (annual line tightness test or monthly monitoring)

i. If annual line tightness test, the test must be provided including information outlined in Technical Chapter 3.5, or

ii. Electronic line leak detector – have last twelve (12) months of 0.2 gph tests or

- annual 0.1 gph test. Record test results in GasLog MIA or,
- iii. Monthly monitoring – have last twelve (12) months of results. Record test results in GasLog MIA

## 8. Suction Piping

Identify the following (see Technical Chapter 3.6):

- American (U.S.) Suction Piping – three (3) year line tightness test or last twelve (12) months of monthly monitoring records
- European (safe) Suction Piping – No release detection is required on suction piping that is designed and constructed to meet the following:
  - Below-grade piping operates at less than atmospheric pressure
  - Below-grade piping is sloped so that the contents drain back into the storage tank if suction is released
  - Only one check valve is present and is directly below the suction pump (if previously verified for the current piping, not required to resubmit)
  - Product that flows by gravity such as in a remote fill pipe or waste oil piping will be regulated as safe suction piping

### b. Corrosion Protection Records.

Impressed current or galvanic system survey form must be completed and submitted unless an alternative form that contains the same information as recorded on the standardized form is pre-approved by the Division. See Technical Chapter 4.1.

The most current three (3) year cathodic protection test results, the previous three (3) year cathodic protection results, and if applicable, cathodic protection test results conducted within six (6) months after a repair to the CP system shall be provided for inspection. The test results shall be provided on the Division's form (unless an alternative form that contains the same information as recorded on the standardized form is pre-approved by the Division) and shall be complete. If CP test results indicate readings are not consistent with the reported material of construction, discuss with O/O during onsite inspection and follow outlined procedures in Section 4.i.3. below.

For impressed current systems, the Impressed Current Cathodic Protection 60-Day Record of Rectifier Operation form (CN-1282) containing at least the last three (3) required readings shall be provided or this information can be provided on the Division's Annual Walkthrough Form (CN-DRAFT) (unless an alternative form that contains the same information as recorded on the standardized form is pre-approved by the Division).

## 1. Interior Tank Lining

(If impressed current or galvanic cathodic protection is not present or active, the tank(s) must be permanently closed. See Technical Chapter 4.1) The O/O should have records relative to adding CP including:

- CP Expert Design
- Tightness test results within three (3) to six (6) months after addition of impressed current (IC) (see tank tightness testing section above and Technical Chapter 3.7)
- CP test within six (6) months after installation of IC

## 2. Spill Bucket (Refer to Technical Chapter 4.2)

Spill bucket logs must be completed for the last twelve months, show any actions taken as a result, and reported on the Division's standardized form CN-1286 or this information can be provided on the Division's Annual Walkthrough Form (CN-DRAFT) (unless an alternative form that contains the same information as recorded on the standardized form is pre-approved by the Division).

## 3. Dispenser (Refer to Technical Chapter 4.2)

Dispenser Logs must be completed quarterly, show any actions taken as a result and reported on the Division's form CN-1287 or this information can be provided on the Division's Annual Walkthrough Form (CN-DRAFT) (unless an alternative form that contains the same information as recorded on the standardized form is pre-approved by the Division).

In accordance with .02(8), for all UST systems installed on or after October 13, 2018, a monthly walkthrough form must be completed. This form may be used in lieu of the previously discussed spill bucket log. All other UST systems must comply with the monthly walkthrough inspection form by October 13, 2021.

In accordance with .02(3)(c), for all UST systems installed on or after October 13, 2018, spill prevention equipment must be tested at least every three (3) years to ensure the equipment is liquid tight (refer to Technical Chapter 4.2 Spill and Overfill Prevention and Division hydrostatic test procedures). All other UST systems must comply with this requirement by October 13, 2021. Complete test results shall be provided on the Division's form (unless an alternative form that contains the same information as recorded on the standardized form is pre-approved by the Division).

## 4. Overfill Verification

(Not required for systems filled by transfers of no more than twenty-five (25) gallons at one time). See Technical Chapter 4.2.

Overfill prevention equipment must be inspected at least once every three (3) years. See

rule .02(3)(a)4. At a minimum, the inspection must ensure that overfill prevention equipment is set to activate at the correct level and will activate when petroleum reaches that level. See rule .02(3)(c).

By October 13, 2021, all overfill prevention equipment shall be tested and every three (3) years thereafter in accordance with rule .02(3)(c)1.(ii.). This rule applies to all newly installed UST systems on or after October 13, 2018. Complete test results shall be provided on a nationally recognized form such as published by the Petroleum Equipment Institute (PEI) unless an alternative form that contains the same information as recorded on the standardized form is pre-approved by the Division.

Must be verified during each inspection by one of the options below:

- Ball Float Valve (cannot be used with suction piping, pressurized deliveries, remote fills or coaxial stage I vapor recovery)
- If a tank owner elects to install a flapper valve in addition to a ball float, it must be set to activate at a lower shutoff level than the ball float according to PEI RP-100.
- Flapper valve (verify presence during day of inspection)
- High level alarms (verify presence during day of inspection)

## 5. Installation

If new installation within the last twelve (12) months or a first inspection of a facility (not previously registered), installation records including tank bill of lading, installation checklist, installer's invoice, and initial systems test prior to dispensing (see tank tightness test section above and Technical Chapter 3.7). For a safe suction system, determine if a previous inspector verified installation records indicating only one check valve is present in the piping immediately below the dispenser or a signed statement from a contractor verifying the same and describing how the determination was made.

## 6. Repair/replacement, if applicable.

Records of repairs to release detection or cathodic protection equipment (for three (3) years after repair for all permanently installed equipment). In accordance with .02(8), for all UST systems installed on or after October 13, 2018, an annual walkthrough form must be completed (CN-DRAFT) (worn or damaged product measurement sticks must be replaced). All other UST systems must comply with the annual walkthrough inspection form (CN-DRAFT) by October 13, 2021.

- Records of repairs to steel tanks or fiberglass-reinforced plastic (FRP) tanks or FRP piping. Tightness test or monthly monitoring results following repair (see tightness testing section above).
- Tightness test results conducted no later than 6 months but no sooner than three (3) months following the addition of anodes to any cathodic protection system. See release detection record section above for tank tightness testing and Technical Chapter 3.7.

## 7. Alternative Fuels

if applicable, check with Notification Section to determine if the Equipment Compatibility Checklist for Underground Storage Tanks Systems with E-blend Fuels (CN-1285) and Statement of Compatibility (CN-1283) was submitted as required. Provide the checklist to the O/O or instruct where to locate the form (Alternative Fuels page on the Division's website <https://www.tn.gov/environment/program-areas/ust-underground-storage-tanks/ust/compliance-inspections/alternative-fuels.html> ) for completion and submittal to the Division. This form is usually submitted with the Division's Pre-Install Notification Form.

### c. Equipment Inspection

**The following information is provided as an outline of the steps to follow to complete the inspection. It is not intended to be a stand-alone document. It is supported by the general requirements outlined in the "General Requirements for an Inspection" Policy and all the Technical Chapters. These contain the details for each item to be inspected and the records required.**

#### 1. Inspect UST Equipment and Facility Perimeter.

This outline was designed to aid the inspector of how to inspect equipment based on the location of the component to be inspected and does not necessarily fit into the broad category. Some items may be repeated if located in multiple areas to be inspected. It is not intended to dictate the actual order of inspection but to ensure that all system components are inspected. The O/O or DAR should provide safe access to all manways and dispensers and remove covers during the inspection. The inspector should take time to thoroughly inspect all equipment. If evidence of a release is discovered, notify a contamination case manager and refer to Rule 0400-18-01-.05 for steps to complete under suspected release including dispenser and STP manways/sumps, environmental impacts [per rule .05(2) includes discovery of petroleum escaping from the UST system, associated containment devices, or any component of a tank, line, dispenser, meter or line leak detector, not designed for the purpose of dispensing petroleum as well as the discovery of petroleum in the environment such as the presence of free product or vapors in soils, basements, sewer and utility lines, and nearby surface water and drinking waters], unusual operating conditions, etc.

**Take photographs of the UST facility with Division issued equipment including the layout unless there have been no modifications since the last inspection. Photograph all violations, tank system anomalies (water in sump, flex piping failure, uncertain if violation(s) exists) and issues/records that require additional review. Photographs should be saved in electronic format and if needed, forwarded to the appropriate technical expert for assistance.**



## 2. Verify System Configuration

- This includes the number, size, contents, location, if tanks are manifolded, etc. and compare to Division records. If discrepancies between database and actual equipment, etc. exist, the information should be updated in the Inspector Amendment page of the UST Notification System-UST Admin application.
- If applicable, identify if oil/water separator is present and has separate holding tank that is regulated and not registered. If not registered, complete Notification Form and refer to Addendum-Atypical UST Systems.

## 3. Submersible Turbine Pump Manways/Sumps/Other Access Port Location

- Check for presence of seepage or drips.
- Is the line leak detector vent tube connected, if required?
- Check for water/soil intrusion or debris/foreign matter that would prevent adequate inspection.
- Inspect wall integrity, seals, boots/gaskets. If ball float valves are present, ensure tank top fittings are tight to ensure proper operation. Ball float valves shall not be used with suction system, coaxial Stage I vapor recovery, remote fills and pressurized deliveries. Examples include: vapor recovery poppet must seat properly, ATG probe cap installed properly and not cracked, ATG probe wire grommet missing or damaged, unused or other gauging ports, etc.
- If present, determine if manifold lines are corrosion protected (piping associated with vapor recovery does not require CP, see Atypical UST Systems, Stage I and II Vapor Recovery section).
- For any sumps that were installed after July 24, 2007 or sumps associated with interstitial monitoring for release detection regardless of installation date and cracks are discovered, then sump or entry boots must be repaired or replaced (see Technical Chapter 3.4, Secondary Containment and Interstitial Monitoring). If debris or liquid is found, the O/O or DAR should be advised to expeditiously remove and properly dispose of debris/liquid/residue in accordance with local, state and federal requirements and determine the source. Small amounts of debris/liquid/residue are acceptable if it does not interfere with the placement or the operation of the sensor.
- If sump sensors are present, ensure they are properly placed and functioning as designed to detect a release. Inspectors should not initiate sensor alarm test; the proper function should have been demonstrated on the Division provided form (unless an alternative form that contains the same information as recorded on the standardized form is pre-approved by the Division).
- Although the submersible turbine pump (STP) head does not require CP, metal piping components and flex connectors in contact with soil or water do require CP. See Technical Chapter 4.1.
- If the reported material of construction is in question, require verification by:
  - installation invoice (if installed within the last three (3) years), or;
  - photographic documentation of the piping material submitted by a qualified third-party, or;

- CP testing conducted and appropriate CP added unless tank or piping was never upgraded to comply with the 1999 upgrade deadline, and thus would require removal.
- If material of construction is confirmed to be in conflict with the reported information, the information can be updated in the Inspector Amendment page of the UST Notification System-UST Admin application.
- If first generation Total Containment Inc. (TCI) flex piping is identified, issue appropriate FO-035. See Technical Chapter 3.5 for example photos
- Line leak detectors, if required, are they present and located in the proper location. For electronic line leak detectors if an annual test of the line leak detector has not been performed, then an authorized representative shall be available to print off pressure line leak setup information. If Veeder Root ELLD, the inspector should verify piping type and length settings using a measuring wheel or Rolatape to ensure the estimated piping length matches the reported length (30% of the actual piping length or fifty feet whichever is less) on the provided setup information to ensure ELLDs are setup correctly.

#### 4. Fill Port/Spill Bucket(s) Location

- Visually confirm buckets appear to be functional (no holes or cracks, no debris). If debris or liquid is found and immediately removed, this would not be a violation. If not removed during the inspection, require removal as a violation in the results of inspection letter. If not removed within timeframe outlined, issue as a violation in Enforcement Action Notice. If the inspector encounters a cracked or defective spill bucket during an inspection, they should inform the O/O that a replacement is required unless the damaged part is a component for which the manufacturer provides repair parts and allows repairs to be conducted. Some companies provide spill bucket liners; however, most manufacturers do not support the installation of liners as an acceptable repair to the spill bucket. Depending upon the appearance of the damage to the spill bucket, an O/O will be given an opportunity to conduct an integrity test in lieu of replacement. If the integrity test determines that the bucket is tight, it would not require replacement. Refer to Technical Chapter 4.2, Appendix 1 for Hydrostatic Testing Procedures. Inform the O/O and request in results of inspection letter that they notify the inspector seventy-two (72) hours prior to replacement so that the inspector can be present to determine if an environmental impact has occurred. If properly notified, the inspector would inspect beneath the spill bucket to determine if staining and/or free product is present. If contamination is discovered, a site check would be required (issue form letter FO-001scsb with the enclosure). This would involve placing one boring in the assumed downgradient direction of the tankhold which houses the defective bucket but outside the tankhold.
- Determine if drop tube is present, if required (for SIR, to exempt risers from CP or for a flapper-valve installation)
- Determine if measurements made through a drop tube using gauging stick or ATG (for SIR only). Gauging stick should be in good condition and be capable of

measuring to the nearest 1/8th of an inch.

- Presence of overfill equipment (visually verify flapper valve or automatic shutoff, if applicable)
- Each spill bucket shall be provided with a lid that is in good condition and is not in contact with the fill cap.

By October 13, 2021, all spill prevent equipment shall be tested and every three (3) years thereafter in accordance with rule .02(3)(c)1.(ii). This rule applies to all newly installed UST systems on or after October 13, 2018.

## 5. Overfill Equipment (if not flapper or other automatic shutoff) Location

By October 13, 2021, all overfill prevention equipment shall be tested and every three (3) years thereafter in accordance with rule .02(3)(c)2. **This rule applies to all newly installed UST systems installed on or after October 13, 2018.**

## 6. Dispenser Location

- Check for presence of seepage or drips and note as an observation to be addressed and if applicable, consult Modified Site Check Policy for Dispenser Leaks (issue form letter FO-001scd). If not repaired within timeframe outlined, issue as a violation.
- Debris that is found under a dispenser may interfere with the following: observing a leak, determining if flex connectors require boots/CP or to determine if shear valves are properly anchored. Debris should be immediately removed. If not immediately removed, require removal as an observation in the results of inspection letter.
- Metal piping components and flex connectors under dispensers in contact with soil or water CP should be evaluated. See Technical Chapter 4.1. Inspect sumps, if present.

For any sumps that were installed after July 24, 2007 and cracks are discovered, then sump or entry boots must be repaired or replaced (see Technical Chapter 3.4 Secondary Containment and Interstitial Monitoring). If debris/liquid is found in a sump (small amounts of debris/liquid/residue are acceptable as long as it does not interfere with the placement or the operation of the sensor), require the O/O to remove and properly dispose of the liquid in accordance with local, state and federal requirements. If damaged sump appears to have allowed a release to the environment, consult Modified Site Check Policy for Dispenser Leaks (issue form letter FO-001scd). By October 13, 2021, all containment sumps shall be tested and every three (3) years thereafter in accordance with rule .04(4)(c)1. **This rule applies to all newly installed UST systems installed on or after October 13, 2018**

- If sensors are present, ensure they are properly placed and functioning as designed. (Inspectors should not initiate sensor alarm test). If liquid is found, the O/O or DAR should be advised to expeditiously remove and properly dispose of in accordance with local, state and federal requirements.

- If discrepancies between database and actual equipment, etc. exist, the information can be updated in the Inspector Amendment page of the UST Notification System-UST Admin application.
- Verify piping type (suction/pressurized/gravity), configuration, and presence of flex connectors, ball valves and/or swing joints (sometimes seen in metallic piping runs). Determine if CP requirements are met. If non-metallic piping installed after November 1, 2005 determine if piping is labeled as required in rule 0400-18-01-.02(4)(b)1.
- If not previously verified by inspector in the inspection database, identify material of construction (see Section 4.i.3.).
- If first generation TCI flex piping is identified, issue appropriate FO-035. See Technical Chapter 3.5 for example photos.
- If applicable, determine if E-85 compatibility documents have been submitted by the O/O to the Notification Section. Provide the checklist to the O/O or instruct where to locate the form (Alternative Fuels page on the Division's website) for completion and submittal to the Division. This form is usually submitted with the Division's Pre-Install Notification Form. If documents not on file, require documents as a violation in the results of inspection letter.
- Check for presence of satellite dispensers (refer to addendum Atypical UST Systems).
- If dispenser nozzles are bagged, ask if related to regulated issue. For example, if all nozzles for the regular product are bagged, this may indicate a leak detector restricted flow or line problem.
- Ensure shear valves are properly anchored (see Technical Chapter 3.5) Refer to Shear Valve Memorandum in the policy section of the Standardized Inspection Manual.
- Identify CP Equipment (everything not seen at manways or dispensers)
- Locate rectifier box if system is impressed current
- Verify that the impressed current system is turned on (inspectors should not activate).
- Verify power warning and alarm lights functional, if present.
- Determine if volt and amp meters appear to be operating properly.
- If junction box present, inspect the number of shunts being used to determine number of anodes (should almost always have one anode per shunt being used).
- Check rectifier log if not previously provided.
- Note the volt and amp readings at time of inspection and determine if they are consistent with readings from rectifier log. (see Technical Chapter 4.1. Corrosion Protection for acceptable variance)
- Document if exposed or broken anode wires are present and require repairs.

## 7. Site Evaluation

This is a determination if environmental impact is present and if so, refer to contamination case manager). Check for:

- Surface water impacts
- Storm/sanitary sewer impacts
- Petroleum vapors in buildings
- Evidence of a substantial impact to soil and/or parking lot from spill, overfill or underground release (except for diesel dispenser)
- If new concrete patches, ask for repair/replacement records if related to UST regulated issue.
- If release is suspected or confirmed and observation wells are present and can be accessed, require the O/O or DAR to open the well and the inspector should use a bailer to determine if an environmental impact is present such as free product.
- Indications of an unapproved closure.

## 9. Inside Facility

- If an ATG is present, ensure that it is operational (inspectors should not touch or instruct on use). If leak detection records are missing or invalid or active alarms are observed (such as flashing lights, audible or displayed alarm), owners should provide a copy of the in-tank alarm history report to determine if any tank alarms were documented during that time frame. This allows the inspector to determine if a suspected release has occurred but does not substitute for monthly RD records. (see Technical Chapter 3.2 to identify a suspected release response).
- If records are not available for review on the day of the inspection, then the O/O should be cited for any appropriate violations for which the absence of records apply.
- For electronic line leak detectors, if an annual test of the line leak detector has not been performed, then an authorized representative shall be available to print off pressure line leak setup information. If Veeder Root ELLD, the inspector should verify piping type and length settings using a measuring wheel or Rolatape to ensure piping length matches the reported length on the provided setup information (30% of the actual piping length or fifty feet whichever is less). (If approximate piping length does not match setup information, the LLD will not function properly and the information should be submitted for additional review).
- If rectifier located inside, see CP section above.

## 10. Photographing and/or Scanning Records

Photograph and/or scan all records and documentation of violations (such as ATG Console Alarms, Paperwork Violations, Failing Release Detection Records, Failing CP Tests, uncertain if violation(s) exists) and issues/records that require additional review. Photographs and/or scanned documents should be saved in pdf format and if needed,

forwarded to the appropriate technical expert for assistance.

### **11. Temporarily Out of Service (See TOS SIM Chapter for additional details):**

- Check product levels,
- ensure CP is operational and applicable records maintained,
- RD records for past twelve (12) months if residue present and greater than one inch
- If the UST System has been TOS greater than three (3) months ensure all pumps, lines, manways, ancillary equipment are secured and properly registered as TOS.

### **12. Site Sketch**

Complete the site sketch in GasLog unless the site sketch completed for the previous inspection and no modifications were made since the last inspection.

### **13. Suspected Releases or Environmental Impacts**

If suspected releases or environmental impacts are discovered, complete operator and site section in GasLog and document as instructed and include photos.

### **14. O/O discussion**

The inspector should note the following on the inspection report and discuss with the O/O onsite at the conclusion of the inspection:

- Violations found
- Items that cannot be answered or resolved
- More information needed

The inspector will inform the O/O that a follow-up letter will be issued outlining the above listed items, answer questions, and offer suggestions to organize records.

In accordance with rule 0400-18-01-.16(4), if the Division determines that the UST system is out of compliance at any time, then successful completion of operator retraining appropriate to the level of the operator class must be completed within thirty (30) days from the date the Division determines that the UST system is out of compliance.

If the inspector later discovers issues that were not discussed onsite, the inspector should contact the O/O identifying the issue, work with the O/O to resolve and note that it will be reviewed during the next inspection. However, if inspector notes missing records that were required to be available for review during the inspection and are submitted later, these and other submitted late records are subject to potential violations.

An example includes, but is not limited to, records submitted after the inspection indicate a suspected release. If the tank internal lining is the only method of corrosion

protection, inform the O/O that they must permanently close the tank(s) and refer to the Enforcement Section.

## **6. Inspection Follow-Up**

### **a. No Violations Found.**

If no violations found, issue FO-037 through mail merge feature of GasLog MIA

### **b. Observations.**

An observation is any item not specifically listed in the Rules of the Division of Underground Storage Tanks, 0400-18-01-.01 et seq. This could include best management practices, preventative measures to avoid future potential violations, etc.

### **c. Records Submitted for Review After the Date of Inspection.**

Review all records (paper, photographs or scans) submitted after the inspection. If the records submitted completely address outstanding violations, then issue FO-036vc (violations corrected).

### **d. Records NOT Submitted for Review After the Date of Inspection.**

If records were not provided on the date of inspection and are not supplied before letter issuance, send appropriate FO-036 letter.

### **e. Ownership Changes.**

If ownership issues were encountered during the scheduling or inspection process but were resolved through proper registration, issue all correspondence to the newly registered owner. If ownership was unresolved, issue correspondence to registered owner.

If new notification form was completed during inspection or required to update information, upon receipt of the form, the inspector will then forward to the Notification Section.

### **f. Corrosion Protection**

If tank internal lining is the only method of corrosion protection, include language in the correspondence to inform the O/O that they must permanently close the tank.

### **g. Violations Found (FO-036 Letters).**

- Confirm GasLog MIA generated violations. Resolve any violations in question with the Enforcement Section. If additional information is needed to properly complete inspection, complete that variable in the letter. Issue the appropriate Results of Inspection Letter (FO-036) – violations found. Be sure to include spill bucket replacement, failure to register, or failure to report a suspected/confirmed release if discovered during the inspection.
- If the O/O has not designated a Class A/B or not currently an active designee, include as

a violation 0400-18-01-.16(1)(a) or (2)(a) in the Results of Inspection letter.

- Include the violation 0400-18-01-.16(3)(c) in the Results of Inspection letter if a sign or instruction manual is not placed where the Class C operator would be expected to see it during the normal course of their work. If a facility is unattended, a Class B operator that is also trained for Class C and will respond to emergencies and alarms then no violation exists.
- If a facility is unattended part of the time:
- The facility must have a sign or instruction manual while attended and
- Must have a B Operator respond to all emergencies and alarms while unattended 0400-18-01-.16(3)(d).
- In accordance with rule 0400-18-01-.16(4), if the Division determines that the UST system is out of compliance at any time, then successful completion of operator retraining appropriate to the level of the operator class must be completed within thirty (30) days from the date the Division determines that the UST system is out of compliance .
- If needed issue the appropriate FO-035) flex piping letter in addition to the appropriate results of inspection letter. (A visual non-metallic piping identification guide can be found here [http://www.nwglde.org/downloads/flexpipeid\\_guide.pdf](http://www.nwglde.org/downloads/flexpipeid_guide.pdf).)
- If extension request filed, issue extension as outlined in the Enforcement Policy.
- If enforcement action required as outlined in the Enforcement Policy:
  - Issue appropriate EAN letter,
  - Prepare and submit the appropriate Enforcement Action Request (EAR).
  - Email the above to the enforcement team at the Enforcement Team's internal email address.

#### **h. Documentation and Database Tracking**

- Track all correspondence in GasLog.
- Complete SOC table as reflected in GasLog MIA (violations found during inspection) for both Release Detection and Release Prevention.
- If inspection is being conducted in accordance with .09(10)(c) as a result of a release, notify the Contamination Case Manager, if applicable and/or complete the .09(10)(c) form and submit to Fund Eligibility Coordinator.
- If applicable, draft memo to EFOM for referral to appropriate agency for issues not regulated by UST but observed during inspection.
- **Update SOC tables if records are submitted for review that demonstrate compliance at the time of inspection.**