

**BEFORE THE CORPORATION COMMISSION OF THE STATE OF OKLAHOMA**

IN THE MATTER OF A PERMANENT  
RULEMAKING OF THE OKLAHOMA  
CORPORATION COMMISSION AMENDING  
**OAC 165:25, UNDERGROUND STORAGE  
TANKS**

**CAUSE NO. RM 202100007**

**CHAPTER 25 ADOPTED BY THE COMMISSION  
AT A PUBLIC HEARING ON February 10, 2022**

**TITLE 165. CORPORATION COMMISSION  
CHAPTER 25. UNDERGROUND STORAGE TANKS**

**SUBCHAPTER 1. GENERAL PROVISIONS**

**PART 3. DEFINITIONS**

**165:25-1-11. Definitions**

In addition to the terms defined in 17 O.S. §§ 303 and 348, the following words or terms, when used in this Chapter, shall have the following meaning unless the context clearly indicates otherwise:

**"Agent"** means a person authorized by another to act on their behalf, either out of employment or contract.

**"Airport"** means landing facility for aircraft that are routinely available for public use (whether routinely used or not). Airports as used in this Chapter do not include private airstrips or private airports.

**"Airport hydrant system"** means an underground storage tank system which fuels aircraft and operates under high pressure with large diameter piping that typically terminates into one (1) or more hydrants (fill stands). The airport hydrant system begins where fuel enters one (1) or more tanks from an external source, such as a pipeline, barge, rail car, or other motor fuel carrier.

**"ATG"** means automatic tank gauge.

**"Ball float functionality"** means the ball float is operational as designed.

**"BTEX"** means benzene, toluene, ethylbenzene and xylene.

**"Bulk plant"** means a petroleum storage tank facility where regulated substances are received by tank vessels, pipelines, tank cars or tank vehicles and are stored or blended in mass quantities or bulk for the purpose of distribution by a tank vessel, tank car, tank vehicle, portable tank or other container, for wholesale or retail sale.

**"Cathodic protection"** means a technique designed to prevent the corrosion of a metal surface by making that surface the cathode of an electrochemical cell. For example, protection can be accomplished with an impressed current system or a galvanic anode system.

**"Change in service"** means a change in the status of a storage tank (i.e., from currently in use to temporarily out of use); or change of regulated substance that a storage tank contains.

**"Commission"** or **"OCC"** means the Oklahoma Corporation Commission.

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**"Compatible"** means the ability of two (2) or more substances to maintain their respective physical properties upon contact with one another for the design life of the petroleum storage tank system under conditions likely to be encountered in the system.

**"Corrosion expert"** means an individual having the requisite knowledge, experience, certification, and training to design, install, test, and maintain corrosion protection systems.

**"EPA"** means the United States Environmental Protection Agency.

**"Electronic signature"** means an electronic signature as defined in OAC 165:5-1-3.

**"Farm tank"** is a tank located on a tract of land devoted to the production of crops or raising animals, including fish, and associated residences and improvements. A farm tank must be located on the farm property. "Farm" includes but is not limited to fish hatcheries, rangeland, and nurseries with growing operations.

**"Field constructed tank"** means a tank constructed in the field such as a tank constructed of concrete that is poured in the field, or a steel or fiberglass tank primarily fabricated in the field.

**"Financial responsibility"** shall have the same meaning in this Chapter as in 40 CFR 280 Subpart H.

**"Financial security"** means holding financial security in a tank system or facility site and is not considered ownership of a tank system unless certain criteria of 40 CFR 280 Subpart H is met.

**"Fleet and Commercial"** means any facility as defined in this Chapter that uses underground storage tanks to store regulated substances for use in its own vehicles or equipment.

**"Flow-through process tank"** means a tank that forms an integral part of a production process through which there is a steady, variable, recurring or intermittent flow of material during the operation of the process. Flow-through process tanks do not include tanks used for the storage of materials prior to their introduction to the process or for the storage of finished products or by-products from the production process.

**"Formal Enforcement Action"** means the process of ensuring compliance with Commission regulations, rules, orders, requirements, standards, and/or state law when a violation occurs and PSTD initiates an enforcement Complaint under the contempt procedure in Oklahoma Administrative Code (OAC) 165:5 Subchapter 19 to be heard at the Commission by an Administrative Law Judge or the Commissioners.

**"Gathering lines"** means a gathering line or gathering system as defined in OAC 165:45-1-2.

**"Important building"** means a building that is considered not expendable in an exposure fire.

**"Inert material"** means a solid, motionless substance that is neither chemically nor biologically reactive, is denser than water, and will not decompose. Examples of inert material include sand and concrete, or as otherwise approved by PSTD staff.

**"Lender liability"** shall have the same meaning in this Chapter as in 40 CFR 280 Subpart I.

**"Licensed Environmental Consultant"** means an individual who has a current license issued by PSTD to perform corrective action.

**"Maintenance"** means the normal operational upkeep necessary to prevent a petroleum storage tank system from releasing product.

**"Marina"** means any fuel storage tank system located on or by the water for the purpose of fueling watercraft.

**"Observation well"** means a cased and screened boring or drilled hole, installed within the tank excavation or piping trench that can be used for the continuous or periodic evaluation of groundwater quality or the detection of soil vapors as a method of release detection.

**"Operational life"** means the period beginning from the time installation of the tank or system is commenced until it is properly closed or removed as provided for in this Chapter.

**"Operator"** means any person in control of or having responsibility for the daily operation of the storage tank system, whether by lease, contract, or other form of agreement. The term "operator" also includes a past operator at the time of a release, tank closure, violation of the Oklahoma Petroleum Storage Tank Consolidation Act, or a rule promulgated thereunder, or a requirement of the Commission. In the case of a storage tank system in service/use before November 8, 1984, but no longer in service/use on that date, the last person to operate the storage tank system immediately before the discontinuation of ~~it's~~ its service/use.

**"Out of Order tag"** means tag, device or mechanism on the tank fill pipe that clearly identifies an underground storage tank as ineligible for delivery of product.

**"Owner"** means any person as set forth in 17 O.S. § 303(27), including the real property owner where the storage tank system is still present, the storage tank system presence is a trade fixture or improvement or both. It is not necessary that the real property owner sold, used, or stored regulated substances in, of, or from the storage tank system. However, a real property owner who has a storage tank system located on their property that was taken out of service/use prior to November 8, 1984, is not considered to be a storage tank owner for any PSTD regulated purpose.

**"OWRB"** means the Oklahoma Water Resources Board.

**"Permanent out of use"** or **"POU"** means a petroleum storage tank system that is not in service/use, does not contain regulated substances, and is not intended to be placed back in service/use.

**"Private airport"** means an airport used only by its owner and regulated as a fleet and commercial facility.

**"Private airstrip"** means a personal residential takeoff and landing facility part of the airstrip owner's residential property.

**"PSTD"** means Petroleum Storage Tank Division.

**"Recalcitrant owner"** means an owner/operator who is responsible for a tank system and after notice will not adhere to a PSTD enabling statute, Commission rule, requirement, or order.

**"Regulated substance"** means antifreeze, motor oil, motor fuel, gasoline, kerosene, diesel or aviation fuel as set forth in 17 O.S. § 305. It does not include compressed natural gas, liquid natural gas or propane.

**"Release detection"** means the methodology used in determining whether a release of regulated substances has occurred from a petroleum storage tank or system into the environment or into the interstitial area between the underground storage tank system and its secondary barrier.

**"Repair"** means to restore to proper operating condition a tank, pipe, spill prevention equipment, overfill prevention equipment, corrosion protection equipment, release detection equipment or other UST system component that has caused a release of product from the UST system or has failed to function properly.

**"Residential tank"** is a tank located on real property used primarily for dwelling purposes.

**"Retail facility"** means a service station, convenience store or any other facility selling a PSTD regulated substance that is open to the general public.

**"Secondary containment"** means an underground storage tank and/or piping with inner and outer barriers which provide a space for interstitial (the space between the inner and outer walls of a double walled tank or piping) monitoring.

**"Tampering"** means willful intention in an attempt to deceive, cheat or misrepresent facts to the public. Tampering also presents a risk to the environment as well as public health, safety and welfare.

**"Tank tightness testing"** or **"precision testing"** means a procedure for testing an underground storage tank system's integrity.

**"Temporary out of use"** or **"TOU"** means the status of an underground storage tank system that has been taken out of service/use with the intent to permanently close or return to service.

**"TPH"** means total petroleum hydrocarbons.

**"Underground storage tank"** or **"UST"** "storage tank" as defined in 17 O.S. § 303(40) that has ten percent (10%) or more of its volume beneath the surface of the ground.

**"Underground storage tank system"** means a closed-plumbed system including, but not limited to the underground storage tank(s), the individual storage tank compartments, the lines, dispenser for a given product, containment sump, if any, and ancillary equipment or a delivery truck that is connected to the storage tank system.

**"Used Motor Oil"** is any spent motor oil removed from a motor vehicle.

## **PART 9. NOTIFICATION AND REPORTING REQUIREMENTS**

### **165:25-1-48. Tank and line tightness testing**

(a) Tank and line tightness testing results in which any part of the tank system tested does not pass must be reported to the PSTD within twenty-four (24) hours by the owner, operator, their employees or agents, and also independently by the person or company performing the test. Complete test results must be submitted within 7 days of testing.

(b) Tank tests must include both the wetted portion and ullage portion of the tank.

(c) Hydrostatic line tightness tests and line leak detector tests must be conducted by a certified tester, if applicable, in accordance with manufacturer's instructions, and reported on the prescribed PSTD form.

(d) The tester performing line and leak detector tests must also certify that the line leak detector is installed properly.

(e) All personnel performing tank and line testing must have the required education, experience, knowledge and competence to correctly perform testing services in accordance with the testing equipment, manufacturer certification and applicable industry standards or codes.

(f) Tank and line tightness testing must be scheduled by submitting the PSTD scheduling form [in the established online format](#) and PSTD staff may be present.

## **SUBCHAPTER 2. GENERAL REQUIREMENTS FOR UNDERGROUND STORAGE TANK SYSTEMS**

### **PART 1. CODES AND STANDARDS**

#### **165:25-2-2. Incorporated codes and standards**

Specific references to documents are made in this Chapter. Each of these documents or part thereof is included by reference as a standard. New editions of codes and standards supersede all previous editions. Commission rules will supersede in all conflicts between PSTD rules and any

industry standard. These codes and standards will be updated periodically through a formal rulemaking procedure initiated by PSTD to reflect any substantive or relevant changes.

(1) National Fire Protection Association Standards:

- (A) Standard Number 30, ~~2018~~ [2021](#), "Flammable and Combustible Liquids Code."
- (B) Standard Number 329, ~~2015~~ [2020](#), "Handling Releases of Flammable and Combustible Liquids and Gases."
- (C) Standard Number 385, 2017, "Tank Vehicles for Flammable and Combustible Liquids."
- (D) Standard Number 326, ~~2015~~ [2020](#), "Safeguarding Tanks and Containers for Entry, Cleaning and Repair."
- (E) Standard Number 30A, ~~2018~~ [2021](#), "Motor Fuel Dispensing Facilities and Repair Garages."

(2) American Petroleum Institute Standards

- (A) Recommended Practice 1615, ~~(2011)~~, "Installation of Underground ~~Hazardous Substances~~ or Petroleum Storage Systems, ~~Sixth Edition~~." [Sixth Edition, April 2011, Reaffirmed May 2020.](#)
- (B) Recommended Practice 1632, ~~(R2010)~~, "Cathodic Protection of Underground Storage Tank and Piping Systems." [Third Edition, May 1996, Reaffirmed December 2010.](#)
- (C) Recommended Practice 1604, ~~(R2010)~~, "Closure of Underground Petroleum Storage Tanks, ~~Third Edition~~." [Fourth Edition, February 2021.](#)
- (D) Recommended Practice 1631, ~~(2001)~~, "Interior Lining and Periodic Inspection of Underground Storage Tanks." [Fifth Edition, June 2001, Reaffirmed May 2020.](#)
- (E) Recommended Practice 1621, ~~(R2012)~~, "Bulk Liquid Stock Control at Retail Outlets." [Fifth Edition, May 1993, Reaffirmed May 2020.](#)
- (F) Recommended Practice 1626, ~~(2010)~~, "Storing and Handling Ethanol and Gasoline - Ethanol Blends at Distribution Terminals and ~~Service~~ [Filling Stations.](#)" [Second Edition, August 2010, Errata February 2011, Addendum August 2012, Reaffirmed May 2020.](#)
- (G) Recommended Practice 1627, ~~(R2000)~~, "Storing and Handling of Gasoline - Methanol/Cosolvent Blends at Distribution Terminals and Service Stations." [First Edition, August 1986, Reaffirmed January 2000.](#)
- (H) Publication 1628, ~~(1996)~~, "A Guide to the Assessment and Remediation of Underground Petroleum Releases." [Third Edition, July 1996.](#)
- (I) ~~Publication~~ [Recommended Practice](#) 2200, ~~(2015)~~, "Repairing ~~Crude Oil, Liquefied Petroleum Gas, and Product~~ [Hazardous Liquid Pipelines,](#) ~~Fourth Edition~~." [Fifth Edition, September 2015.](#)
- (J) ~~Publication~~ [Standard](#) 2015, ~~(2018)~~, "Requirements for Safe Entry and Cleaning of Petroleum Storage Tanks." [Eighth Edition, January 2018.](#)
- (K) Recommended Practice 1637, ~~(R2012)~~, "Using the API Color Symbol System to ~~Mark Identify~~ [Equipment, and Vehicles, and Transfer Points for Petroleum Fuels and Related Products at](#) ~~for Product Identification at Gasoline~~ [Dispensing and Storage](#) Facilities and Distribution Terminals, ~~Third Edition~~." [Fourth Edition, April 2020.](#)

(3) National Association of Corrosion Engineers:

- (A) Standard Number SP0169-2013, "Control of External Corrosion on Underground or Submerged Metallic Piping Systems."
- (B) Standard Number SP0285-2011, "External Corrosion Control of Underground Storage Tank Systems by Cathodic Protection."

- (C) Standard Number SP0286-2007, "Electrical Isolation of Cathodically Protected Pipelines."
- (D) International Test Method, TM 0101 2012, "Measurement Techniques Related to Criteria for Cathodic Protection of Underground Storage Tank Systems."
- (E) International Test Method, TM 0497 ~~2012~~ 2018, "Measurement Techniques Related to Criteria for Cathodic Protection on Underground or Submerged Metallic Piping Systems."
- (4) Underwriter's Laboratory Standards:
- (A) Standard UL58, 2018, "Steel Underground Tanks for Flammable and Combustible Liquids."
- (B) Standard UL1316 ~~Bulletin-2013~~ 2018, "Glass-Fiber-Reinforced Plastic Underground Storage Tanks for Petroleum Products, Alcohols, and Alcohol-Gasoline Mixtures."
- (C) Standard UL1746 Bulletin 2013, "External Corrosion Protection Systems for Steel Underground Storage Tanks."
- (D) Standard UL567 ~~Bulletin-2012~~ 2021, "Emergency Breakaway Fittings, Swivel Connectors and Pipe-Connection Fittings for Petroleum Products and LP-Gas."
- (E) Standard UL971 Bulletin 2011, "Nonmetallic Underground Piping for Flammable Liquids."
- (5) American Society for Testing Materials:
- (A) ASTM E1739-95 (2015), "Standard Guide for Risk-Based Corrective Action Applied at Petroleum Release Sites."
- (B) ASTM G158-98 (2016), "Three Methods of Assessing Buried Steel Tanks."
- (6) Petroleum Equipment Institute:
- (A) PEI/RP ~~100-17~~ 100-20 (~~2017~~ 2020 Edition) "Recommended Practices for Installation of Underground Liquid Storage Systems."
- (B) PEI/RP 400-18 (2018 Edition), "Recommended ~~Practices-Procedures~~ for Equipment Testing Electrical Continuity of Fuel Dispensing Hanging Hardware."
- (C) PEI/RP ~~500-11~~ 500-19 (~~2011~~ 2019 Edition), "Recommended ~~Practice~~ Practices for Inspection and Maintenance of Motor Fuel Dispensing Equipment."
- (D) PEI/RP ~~900-17~~ 900-21 (~~2017~~ 2021 Edition), "Recommended Practices for the Inspection and Maintenance of UST Systems."
- (E) PEI/RP 1000-14 (2014 Edition) "Marina Fueling Systems"
- ~~(E)~~ (F) PEI/RP ~~1200-17~~ 1200-19 (~~2017~~ 2019 Edition), "Recommended Practices for the Testing and Verification of Spill, Overfill, Leak Detection and Secondary Containment Equipment at UST Facilities."
- ~~(F)~~ (G) PEI/RP ~~1700~~ 1700-18 (2018 Edition), "Recommended Practices for the Closure of Underground Storage Tank and Shop-Fabricated Aboveground Storage Tank Systems."
- (7) Steel Tank Institute:
- (A) STIP3<sup>®</sup>, "Specification and Manual for External Corrosion Protection of Underground Steel Storage Tanks."
- (B) STI-R892-91, "Recommended Practice for Corrosion Protection of Underground Piping Networks Associated with Liquid Storage and Dispensing Systems."
- (C) STI-R894-91, "Specification for External Corrosion Protection of FRP Composite Underground Steel Storage Tanks."
- (D) RP-972-10, "Recommended Practice For The Addition of Supplemental Anodes to STI-P3 USTs."

- (E) STI-ACT-100-U<sup>®</sup>, F961, "Specification for External Corrosion Protection of Composite Steel Underground Storage Tanks".
- (F) STI-F841, "Standard for Dual Wall Underground Steel Storage Tanks."
- (G) STI-F922, "Specification for Permatank<sup>®</sup>."
- (H) RP-R051, "Cathodic Protection Testing Procedures for STI-P3<sup>®</sup> Underground Storage Tank Systems."
- (8) Factory Mutual 1920, "Flexible Pipe Couplings."
- (9) National Leak Prevention Association ([NLPA](#)) Standard 631, "Spill Prevention, Minimum 10 Year Life Extension, Existing Steel UST by Lining without Additional Cathodic Protection."
- (10) National Groundwater Association, 1986, "RCRA Ground Water Monitoring Technical Enforcement Guidance Document (TEGD)."
- (11) U.S. Environmental Protection Agency Office of Water, 1997, Drinking Water Advisory: "Consumer Acceptability Advice on Health Effects Analysis on Methyl Tertiary-Butyl Ether (MTBE)."
- (12) Ken Wilcox Associates, Inc., First Edition: "Recommended Practice for Inspecting Buried Lined Steel Tanks Using a Video Camera."
- (13) [NLPA/KWA Standard 832, Preventative Maintenance, Repair and In-situ Construction of Petroleum Sumps.](#)

### PART 3. DESIGN AND INSTALLATION

#### **165:25-2-36. Tank system installation**

- (a) **Backfill material.** Backfill material used below, around, and/or above a new underground storage tank system installation must be clean, unused, non-corrosive porous material such as sand, crushed rock or pea gravel specified by the tank manufacturer. The Licensed UST Installer must be present and continuously supervise backfilling operations to ensure that proper procedures are followed.
- (b) **UST installation.**
  - (1) Owners/operators of all underground storage tank systems must notify PSTD at least forty-eight (48) hours prior to the installation of underground storage tanks and/or lines by submitting the PSTD scheduling form and receiving confirmation of the installation and the Temporary Authorization for Receipt of Fuel from PSTD. Following the required forty-eight (48) hour notification of new UST installations, an on-site inspection may be required at critical junctures. The PSTD Fuel Specialist monitoring the installation must be contacted prior to initiating the following so it may be observed or inspected:
    - (A) The air/soap test of tanks.
    - (B) The tank pit prior to the placement of tank(s).
    - (C) The backfilling of the lower quadrant of tank(s).
    - (D) The air/soap test, layout of piping, and hydrostatic testing of sumps prior to backfilling.
    - (E) The tightness test of tanks and piping, and leak detector tests prior to startup.
    - (F) Backfilling of all piping.
  - (2) Precautions must be taken to prevent damage to the tank or piping coating during installation. Any damage to the coating must be repaired in accordance with the manufacturer's instructions prior to the completion of the installation.

- (3) Piping must be arranged to minimize crossed lines and interference with conduits and other tank system components. If crossing is unavoidable, factory specifications must be provided to prevent contact between piping segments.
- (4) Underground suction piping must have a minimum slope of one-eighth inch (1/8") per foot toward the tank and must be buried below ground a minimum of eighteen inches (18"). All underground pressurized piping must slope towards the tank. When this presents an issue with containment depth, pressurized piping may change in direction between under dispenser containments (UDCs). Product piping from the first dispenser must be sloped back to the tank and when needed, a transition containment sump may be installed between the first dispenser and the tank. All piping must be sloped to a minimum of one-eighth inch (1/8") per foot and maintain a burial depth of eighteen inches (18").
- (5) If a tank is installed in an area subject to a high water table or flooding, anchoring must be used to prevent tank flotation. Anchoring straps and associated equipment must be installed in a manner that will prevent damage to the tank and/or its coating.
- (6) The tank pit must contain a smooth, evenly graded bed of manufacturer approved material extending the full length of the tank bottom.
- (7) The Licensed UST Installer must follow PEI RP-100 recommended practice for ballasting to prevent tank flotation during installation.
- (8) Licensed UST Installers must be certified by the tank and line manufacturer, if applicable, and must be on site during all installation activities, including preparation for and placement of concrete over any part of the tank system.
- (9) Photos of installation and other required documentation must be submitted with the PSTD registration form within thirty (30) days and tank fees must be paid before a permit will be issued.

#### **165:25-2-40. Installation testing**

- (a) All tanks must be tested with air pressure prior to installation, and/or tested according to manufacturer's specifications. Pressure must not exceed 5 pounds per square inch (psi). The entire tank must be soaped during this period and inspected for bubbling.
- (b) All suction piping must be tested while disconnected from the tank, pumps, and dispensing units. The piping must be subjected to an air test with the following specifications:
  - (1) The piping must be subjected to an air test of at least 50 psi for a period of one hour.
  - (2) All piping joints must be soaped while the system is under pressure, in order to detect any possible leaks.
  - (3) As an alternative to the preceding methods in (1) and (2) above, the piping may be subjected to a vacuum test while connected to tanks, pumps and dispensing units.
- (c) Pressurized piping must be tested while connected to tanks and pumps. The piping must be subjected to an air test of at least 50 psi.
  - (1) Air test secondary piping for a period of one hour, using the test pressure prescribed by the piping manufacturer.
  - (2) Apply soap solution to all joints and piping surfaces and inspect for leaks.
- (d) All piping should be air tested and monitored continuously during the installation.
- (e) Tightness (also called precision) testing of the entire system must be performed after all paving over the tanks and piping has been completed and before the system is placed in operation:
  - (1) A precision tightness test must be performed by a certified tester, and in accordance with manufacturer's instructions; or



- (2) The following alternative to a precision tightness test will be accepted, but only if conducted before the system is put into service:
  - (A) A certified ATG capable of detecting a leak of 0.10 gallons per hour must be used to test the filled portion of the tank and
  - (B) A precision tightness test of the ullage portion of the tank must be completed.
- (3) Testing of both interstice and primary tank of a double wall tank as specified by tank manufacturer must be performed.
- (4) Primary tank openings, manways and risers must be tested during the installation of all double wall tanks.
- (5) The product line(s) must be hydrostatically tested by a NWGLDE approved testing device capable of detecting a leak of 0.10 gallons per hour ~~with a test pressure of 50 psi or 1½ times the operating pressure, whichever is greater. The lines must be tested for a minimum of one hour at one and one-half times the operating pressure and tested in accordance with the testing devices third party certification.~~
- (6) Mechanical and electronic leak detector(s) must be tested for function by simulating a leak and operate in accordance with manufacturer's specifications.
- (7) If an ATG system with electronic line leak detector(s) is installed, it must complete a leak detector test in each of the modes in which it is certified as capable of detecting a leak (e.g. 3 gph, 0.2 gph and 0.1 gph).
- (8) Containment sumps must be tested after all piping and conduit has been installed along with spill prevention equipment (spill buckets) by using vacuum, pressure, or liquid testing in accordance with one of the following criteria:
  - (A) Requirements developed by the manufacturer (owners and operators may use this option only if the manufacturer has developed requirements);
  - (B) Code of practice developed by a nationally recognized association or independent testing laboratory, e.g., PEI RP 1200.

## PART 6. PIPING

### 165:25-2-55.1. Underground storage tank piping materials

- (a) All new or replacement underground pressurized piping must be installed as follows:
  - (1) Nonmetallic;
  - (2) Double-walled;
  - (3) A tracer locator wire must be installed in all piping trenches; and
  - (4) Tank, dispenser, and transition sumps must be installed and monitored per 165:25-3-6.29.
- (b) All new or replacement suction product piping must meet the requirements of 165:25-3-6.29 as follows:
  - (1) Nonmetallic;
  - (2) Double-walled;
  - (3) A tracer locator wire must be installed in all piping trenches; and
  - (4) Tank, dispenser, and transition sumps must be installed and monitored per 165:25-3-6.29.
- (c) Existing facilities that are replacing the lesser of twenty feet (20') or fifty percent (50%) of underground piping must upgrade pursuant to (a) or (b) of this Section. If a metallic line fails due to structural failure or corrosion, all metallic product lines at the facility must be immediately removed, and cannot be repaired.

- (d) Existing facilities that are making any alteration to a fuel island when concrete removal is required must install dispenser sumps and monitor as pursuant 165:25-3-6.29. Repairs to the island that in no way change the island from its original design is not considered making alterations.
- (e) Existing facilities ~~that are replacing dispensers must install dispenser sumps and monitor as pursuant to 165:25-3-6.29 if modifications are made below the dispenser cabinet~~ that are installing new dispensers must install under dispenser containment (UDC) sumps and monitor as pursuant to 165:25-3-6.29. Dispensers will be considered new when both the dispenser and equipment needed to connect the dispenser to a UST system is installed. Check valves, shear valves, unburied risers or flexible connectors and other transitional components are considered equipment that connects a dispenser to a UST system.
- (f) Existing facilities that are replacing underground storage tanks or making repairs at a submersible pump that require excavation of dirt or concrete removal must install tank sumps and they must be monitored pursuant 165:25-3-6.29.
- (g) Existing facilities that are replacing underground storage tanks must replace all single walled piping per (a) or (b) of this section.
- (h) Piping installed as a siphon or to manifold tanks may be single wall non-metallic pipe.
- (i) Ball valves must be installed on new safe suction lines to isolate lines for testing purposes.

### **PART 13. REMOVAL AND CLOSURE OF UNDERGROUND STORAGE TANK SYSTEMS**

#### **165:25-2-131. Tank removal and closure**

- (a) Owners/operators of all underground storage tank systems must notify PSTD at least fourteen (14) days prior to the removal or permanent closure of underground storage tanks and/or lines by submitting the PSTD scheduling form and receiving confirmation of the scheduled removal from PSTD. If events require a change in the date of removal, PSTD shall be given forty-eight (48) hours notice prior to the new date.
- (b) An authorized agent of PSTD may be present to observe the removal and to inspect the closed tank system and the surrounding environment prior to backfilling.
- (c) Tanks and lines must be removed upon closure unless a Commission order grants a variance that allows the tanks and/or lines to be closed in place. Tank systems that are removed from the ground must be transported from the site and whether sold to a scrap dealer or disposed of at an acceptable facility, sufficient holes should be made in the tanks to render the tank(s) unfit for further use. A certificate of destruction must be submitted to PSTD with the UST Closure Report. When scheduling a removal, a site map of where samples are to be taken should be attached to the scheduling form. After closure activities are completed, the excavation must be backfilled no later than seven (7) days upon completion of tank removal. Backfill material shall be earth, gravel, rock, sand or combinations thereof, backfill shall predominate in the finer sizes and present no isolated voids, silt pockets or areas of large stones. Refer to OAC 165:29-3-65 when backfilling. Exceptions to backfilling within seven (7) days may be made when a new tank system is scheduled to be installed in the same tank pit.
- (d) The Licensed UST Remover must be on the job site during all removal activities, beginning with break-out of concrete. This includes Licensed UST Remover presence during cutting and removing concrete over any part of the tank system.
- (e) Photos must be taken of tank(s), line(s) and soil at removal. In the event there is a hole in tank(s) or line(s), further photographic evidence is required. If tank(s), line(s) or excavated soil

show evidence of a release, photos of the apparent release must be taken that indicate the release source.

### **SUBCHAPTER 3. RELEASE PREVENTION AND DETECTION REQUIREMENTS**

#### **PART 2. RELEASE DETECTION REQUIREMENTS AND METHODS**

##### **165:25-3-6.29. Monitoring requirements for piping**

Underground piping that routinely contains regulated substances must be monitored for releases in a manner that meets the following requirements:

**(1) Pressurized piping.**

(A) All underground piping that conveys regulated substances under pressure must be equipped with a mechanical or electronic line leak detector installed and operated in accordance with this Chapter.

(B) New installations and facilities replacing a piping system must have a sump sensor, float or similar mechanical device at each tank, transition, and dispenser sump. Sensors should be mounted near the bottom of the sump(s) and accessible for annual testing.

(C) New installations and facilities replacing a piping system must have double-walled piping. The interstitial area of the piping must be open inside the sumps to allow fuel to drain into the sumps in the event that a leak occurs.

(D) The underground pressure piping from the master dispenser to the satellite must be designed and installed so that the satellite piping is tested by the automatic line leak detector. An annual line tightness test is required on the satellite underground piping.

**(2) Suction piping.**

(A) Suction piping installed after July 1, 2008 must be double-walled piping. The interstitial area of the piping must be open inside the sumps to allow fuel to drain into the sumps in the event that a leak occurs.

(B) New installations and facilities replacing a piping system must have a sump sensor, float or similar mechanical device at each tank, transition, and dispenser sump. Sensors should be mounted near the bottom of the sump(s) and accessible for annual testing.

**(3) Methods of release detection for pressurized piping.** Each method of release detection for piping must be done in accordance with the following requirements.

**(A) Mechanical line leak detectors and annual line tightness testing.**

(i) An annual function test of the operation of the leak detector must be conducted by simulating a leak.

(ii) A hydrostatic line tightness test must be done annually by a certified tester ~~in accordance with this Chapter.~~ The product line(s) must be hydrostatically tested by a NWGLDE approved testing device capable of detecting a leak of 0.10 gallons per hour at one and one-half times the operating pressure and tested in accordance with the testing devices third party certification.

**(B) Sump sensors with automatic line leak detectors.**

(i) Double walled piping with sump sensors, floats or similar mechanical devices at each sump may be used in lieu of annual line tightness testing except at marinas where a line tightness test is required by April 1<sup>st</sup> of each year.

- (ii) The sump sensors, floats or other mechanical devices used must be tested annually. Sensors status and alarm history reports must be printed and retained or use an interstitial monitoring form every thirty (30) days for systems installed after July 1, 2008.
- (iii) An annual function test of the operation of the leak detector must be conducted by simulating a leak.
- (C) Electronic line leak detection. A certified electronic line leak detector may be used in lieu of a mechanical line leak detector and annual tightness test only if:
  - (i) The system is capable of detecting and tests for a leak of three (3) gallons per hour before or after each operation of the submersible turbine pump; and
  - (ii) The system is capable of detecting and tests for a leak of 0.2 or 0.1 gallons per hour at least once every thirty (30) days; and
  - (iii) The system is capable of detecting and tests for a leak of 0.1 gallons per hour annually, AND the system is function tested annually by simulating a leak, and if necessary, calibrated.
- (4) Methods of release detection for suction piping.**
  - (A) Safe Suction Piping. No release detection is required for suction piping installed on or prior to July 1, 2008 if it is designed and constructed to meet (i) through (iv) below:
    - (i) The below-grade piping operates at less than atmospheric pressure.
    - (ii) The below-grade piping is sloped so that the contents of the pipe will drain back into the storage tank if the suction is released.
    - (iii) One (1) check valve is included in each suction line.
    - (iv) The check valve is located directly below and as close as is practical to the suction pump.
  - (B) Tri-annual Line Tightness Testing. Underground piping that conveys regulated substances under suction must have a line tightness test conducted at least every three (3) years by a certified tester.
  - (C) Sump sensors.
    - (i) Double walled piping with sump sensors, floats or similar mechanical devices at each sump may be used in lieu of tri-annual line tightness testing except at marinas where a line tightness test is required by April 1<sup>st</sup> of each year.
    - (ii) The sump sensors, floats or other mechanical devices used must be tested annually according to manufacturer's requirements. Sensors status and alarm history reports must be printed and retained or use an interstitial monitoring form every thirty (30) days for systems installed after July 1, 2008.

### **PART 3. RELEASE INVESTIGATION REQUIREMENTS**

#### **165:25-3-8. Release investigation and confirmation**

- (a) This Section applies to the investigation of all reportable releases unless PSTD specifically waives any part of this Section in writing.
- (b) Owners/operators must immediately investigate and confirm all suspected releases of regulated substances requiring reporting under this Chapter within seven (7) days of receipt of notice from PSTD using the following steps or another procedure approved by PSTD:

(1) **System test.** Owners/operators must conduct tightness tests and if applicable, secondary containment testing, that will determine whether a leak exists in the storage tank system or a breach of either wall of the secondary containment has occurred.

(A) Owners/operators must repair, replace or permanently close as defined in OAC 165:25-2-135, the underground storage tank system and begin investigation in accordance with (b)(2) of this Section if the test results for the system, tank, delivery piping or the interstice indicates that a release exists.

(B) Further investigation is not required if the test results for the system, tank, delivery piping and interstice do not indicate that a release exists and chemical concentrations of regulated substances detected in soil or water are not the basis for a suspicion of a release.

(C) Owners/operators must conduct a site check as described in (b)(2) of this Section if the test results for the system, tank, delivery piping and interstice do not indicate that a release exists but indicate concentrations of regulated substances detected in soil or water are above action levels cited in (c).

(2) **Site check.** Owners/operators must measure for the presence of a release where released chemicals are most likely to be present at the underground storage tank system site. In selecting sample types, sample locations, sample depths, and measurement methods, owners and/or operators must consider the nature of the stored substance, the type of initial alarm or cause for suspicion, the type of native soil, the depth of groundwater, and other factors appropriate for identifying the presence and source of the release. Sample locations should be approximately five feet (5') from the outside of the UST system in native soil or another location approved by PSTD. Analyses for both BTEX constituents and the appropriate TPH must be obtained in all cases. Site check investigations must be conducted by an OCC licensed Environmental Consultant.

(A) If the test results for soil and/or groundwater taken outside the excavation zone or the underground storage tank system site confirm that a release has occurred, owners and/or operators must begin corrective action in accordance with Chapter 29 of Commission rules.

(B) If the test results for the native soil and/or groundwater or the underground storage tank system site do not indicate that a release has occurred, further investigation is not required.

(c) Laboratory analysis of levels of chemical constituent concentrations that may be required to confirm a case are:

(1) Benzene

(A) Native Soils - 0.5 mg/kg

(B) Groundwater - 0.005 mg/l

(2) Toluene

(A) Native Soils - 40.0 mg/kg

(B) Groundwater - 1.0 mg/l

(3) Ethyl Benzene

(A) Native Soils - 15.0 mg/kg

(B) Groundwater - 0.7 mg/l

(4) Xylene

(A) Native Soils - 200.0 mg/kg

(B) Groundwater - 10.0 mg/l

(5) TPH

(A) Native Soils - 50.0 mg/kg

(B) Groundwater - 2.0 mg/l

- (C) If BTEX concentrations are below action levels, a TPH concentration of 500 ~~ppm or~~ mg/kg in soil ~~shall~~ may be required to confirm a case at the discretion of PSTD.
- (d) Within twenty (20) days after the reporting of a release, the owner and/or operator must submit a report to PSTD summarizing the steps taken under (a) through (c) of this Section and any resulting information or data. If a release is confirmed through performance of the steps taken under this Section, then the report must be submitted in accordance with a format established by the PSTD, after which corrective action may be required under the provisions of Chapter 29 of Commission rules. Failure to submit reports in a format established by PSTD within the timeframe required may result in an enforcement action.

## **SUBCHAPTER 18. INSPECTIONS, NOTICES OF VIOLATION, FIELD CITATIONS, AND FORMAL ENFORCEMENT ACTIONS**

### **PART 1. INSPECTIONS**

#### **165:25-18-4. Inspection for compliance**

- (a) All storage tank systems regulated by this Chapter must be physically inspected for compliance with the provisions of this Chapter.
- (b) These inspections may include, but not necessarily be limited to, review of:
- (1) Records of installation.
  - (2) Records of repair and retrofit operations including required tightness testing.
  - (3) Release containment practices.
  - (4) Release detection practices.
  - (5) Compliance with prior Commission orders to perform corrective action.
  - (6) Records of removal and closure.
  - (7) Records that document compatibility with underground storage tank systems storing regulated substances greater than ten percent (10%) ethanol or twenty percent (20%) biodiesel.
  - (8) Records of annual operation and maintenance tests on the electronic and mechanical components of release detection equipment.
  - (9) Site assessments for groundwater or vapor monitoring
  - (10) Current permit for all tanks located at the facility
  - (11) Current operator training certificates for all classes of operators.
- (c) In addition, PSTD may ~~perform~~ require any other inspection, testing, or monitoring necessary to ensure compliance with this Chapter and to protect property, human health, safety and welfare and the environment.

### **PART 5. PENALTIES**

#### **165:25-18-19. Penalties**

- ~~(a) Pursuant to 17 O.S. § 311(A), any person who violates any of the provisions of this Chapter shall be liable for a fine not to exceed \$10,000.00 for each day that the violation continues.~~
- ~~(b)~~ If the person disagrees with the violation(s) listed in the Formal Enforcement Action, ~~they~~ the person may appear ~~at the hearing~~ at the a Commission hearing. If found in violation of PSTD rules at the time ~~the a~~ Commission order is issued, the person must pay the amount of the fine, as well as an administrative cost of \$250.00.