

**MINUTES OF THE
STORAGE TANK ADVISORY COUNCIL MEETING**

November 2, 2021

2:00 p.m.

**Oklahoma Corporation Commission
Jim Thorpe Office Building
2101 N. Lincoln Blvd., 5th Floor, PUD Conference Room
Oklahoma City, OK 73105**

A notice for the Storage Tank Advisory Council (STAC) meeting was publicly posted at the Oklahoma City offices of the Oklahoma Corporation Commission at approximately 12:00 p.m. on October 26, 2021, by Commission employees acting under the direction of Ms. Robyn Strickland, Director of the Petroleum Storage Tank Division (PST). A notice was also provided to the Oklahoma Secretary of State. A copy of the notice and agenda for the meeting are attached to these minutes.

No **Commissioners** were present for the meeting.

Council members present were **Ken Beaty, Derek Blackshare, Todd Darrough, Jeff Johndrow, Robert Keyes,** and **Joe Stephenson.** **Kathy Lippert** was absent.

Joe Stephenson, Chairman, stated that a quorum was present and called the meeting to order at 2:01 p.m.

The **first order of business** was the election of a Vice Chair. Council members present elected **Kathy Lippert** as Vice-Chairman.

The **second order of business** was the Financial Report by Terin Morris, Indemnity Fund Administrator. Ms. Morris reported the October assessment was \$2,030,750.32, total revenue was \$2,055,784.75, there were 84 claims totaling \$932,280.02, and total expenses were \$1,223,417.49. As of October 31, 2021, the Indemnity Fund balance was \$18,786,578.83, less encumbered funds in the amount of \$81,560,636.12, leaving an available balance of \$225,942.71.

Mr. Stephenson asked how revenue had been since our last meeting. Ms. Morris said there had been a downward trend, but it appears to be getting back up to what it was prior to the pandemic.

Robyn Strickland, PST Director, said the \$500,000 per month diversion of the Indemnity Fund assessment to ODOT will expire in January 2022, having reached the \$81,000,000 amount that was statutory. The last collection is in December and the last deposit is in January. If ODOT wanted the money extended past January, they should have introduced legislation last session. She did not know if that was intentional or if they just missed it.

The last deposit is in January, and the \$500,000 will go back to the Indemnity Fund beginning in February. She said that Salim Douglass, PST Technical Manager, indicated they had to decline PO submittals because there was not enough money, and it will take a little time to get acclimated so PO's can be submitted, get work scheduled and reimburse claims.

Mr. Stephenson asked for any other discussion on the Financial Report. There was no discussion.

Dan Boyle, Senior Attorney for PST, introduced himself and Travis Weedn, Deputy General Counsel for PST. Mr. Boyle asked attendees to sign in and said copies of the proposed rules were available also. PST's draft proposed rules were being presented to the Council for their consideration and discussion. Any changes that are made or suggested changes to consider will be further discussed at the next meeting, tentatively set for November 30, 2021. At that meeting, members will vote to recommend if PST should move forward with a rulemaking. After the formal rulemaking begins, there will be two technical conferences where the public is invited to attend and have an opportunity to publicly comment on the proposed rules. The comment period provides the public an opportunity to provide written comments if they cannot or do not want to attend one of the technical conferences. After the technical conferences are held and the comment period ends, Commissioners will have a public hearing to vote on whether or not to adopt the rules. If adopted, they will be submitted to the Governor and Legislature for approval.

The **third order of business** was draft proposed rules by Dan Boyle. Mr. Boyle said PST is proposing rule changes in Chapters 15, 25, and 26. The genesis of the proposed rules comes from an industry stakeholder meeting that took place earlier this summer in which discussions were held regarding ways to improve the rules. The changes presented today are a direct result of those discussions. The rules being stricken are being removed to comply with the Governor's Executive Order to remove unnecessary rules.

Chapter 15 revisions:

165:15-7-5 will correct the statute citation

165:15-13-1 will adopt API RP1637 color symbol system for tank lids

Ken Beaty asked if the color code chart would be available on the website. Justin Lankford said we will post them if API is ok with us doing so.

A commenter asked when they would have to start using API color codes. Mr. Weedn said usually sometime between September and October, depending on when the Governor signs them. PST will send a notice to stakeholders when the rules go into effect. Justin Lankford said there is no grace period and when the rules go into effect, the rule would be enforced. Mr. Weedn said tank lids will be checked as part of their annual compliance inspection. If there is a violation, a NOV is issued, and 30 days will be allowed for you to get them painted.

A commenter asked if the revision to API color codes also requires the lid to meet biodiesel BXX formats as well. Justin Lankford said he did not have the standard with him, but it would be whatever is in the API standard.

Todd Darrough said the standard can be purchased for around \$80. Mr. Lankford said if API doesn't have an issue with us posting it on the website, we will do so but we have to make sure we can.

A commenter asked if they'd be written up if they did not have their lids painted. Mr. Weedn said if the lids are not painted after the rules go into effect, they would get a NOV at the time they are inspected and give them 30 days to come into compliance.

A commenter asked if it was possible to get a copy of the proposed rule changes posted on the website. Mr. Weedn said proposed rules will be posted on the OCC website.

Derek Blackshare said the proposed rules clean up and clarify color coding but also allows for future changes since it automatically incorporates the standard by reference. Mr. Weedn concurred and said the rule on codes and standards says new or updated codes and standards are incorporated, and we try to update them when we open a rulemaking.

Robyn Strickland said once the rule is passed, we plan to contact fuel distributors listed with the OTC to give them a heads up as we have encountered cross dumping in the past when changes like these occur.

Chapter 25 revisions:

165:25-1-11 will add EPA's definition of repair in 40 CFR 280

165:25-1-48 will update the established online process for scheduling a tightness test

165:25-2-2 will update adopted standards to the current edition, and to add a new standard for sump maintenance and repair recently approved by EPA

165:25-2-36 will clarify slope requirements for underground suction and pressurized piping installation

165:25-2-40 will allow shorter testing times if third party certified

165:25-2-55.1 (d) will clarify staff's interpretation of a repair to a fuel island

165:25-2-55.1 (e) will make the language in the rule consistent with the language in the federal regulations (40 CFR 280.20) and clarify when installation of UDC sumps is required

165:25-2-131 will clarify backfilling the excavation and allow it to remain open when replacing tanks in certain situations

165:25-3-6.29 will allow third-party certified methods of shorter testing times

165:25-3-8 will make the language consistent with same rule in Chapter 29

165:25-18-4 will clarify that PST may not conduct the actual testing or monitoring to ensure compliance

165:25-18-19 will revoke unnecessary language already in statute (17 O.S. §311.A)

A commenter asked for clarification about the change on backfill. Justin Lankford said he had discussions with several individuals with differing opinions. One person felt clean, compactible backfill needed to be in the rule, others wanted to know to what degree does it have to be compacted, and another said Chapter 29 allows the backfill to be put back into the excavation. Mr. Lankford questioned whether we want to get so technical in this rule. Originally, the rule change was to allow the excavation to remain open for 14 days. However, everyone he spoke to in industry said the rule has always been 7 days and that is enough. The last person he talked to said they agree with this rule except take out "with clean compactible backfill material" and he is inclined to agree with him.

Robert Keyes said he liked having "clean compactible backfill material" in the rule but asked what that meant. He inherited a site where someone backfilled with construction debris and has a photo with an 18-wheeler sitting on its side over the pit because it sank. If we don't keep that in the rule, we should put an exclusion on what is not acceptable. Mr. Lankford agreed the proposed language is not good and said he wants it to be a good rule with language that everyone understands.

Mr. Blackshare said he would be in favor of removing "with clean compactible backfill material" as it would remove the ambiguity of what meets compaction standards and what meets clean. **Mr. Keyes** asked if we risk allowing construction debris to be put in the pit when we do that, and **Mr. Blackshare** agreed it probably would. **Mr. Keyes** said he is encountering 3- and 5-foot pieces of concrete in the bottom that is not even leveled flat, and we needed some kind of standard. Mr. Lankford said it also matters what the property owner is doing with the land, it may be a landfill or a parking lot, or a property owner with cattle on the land.

Mr. Keyes felt the rule needed to say what is acceptable to meet minimum standards. Mr. Lankford said the rule in Chapter 29 says you can return the backfill to the pit but if soil samples come back above action levels, it must be removed and filled with an acceptable material. Mr. Lankford said he wants to be sure everyone is on the same page.

Mr. Stephenson suggested "appropriate for intended use" could be used. Mr. Lankford had concerns that would leave it to his compliance officer's interpretation to determine what is appropriate. He wants to be consistent with our decisions.

Mr. Keyes felt the rule needs to be clear that you can't backfill with construction debris and it must be material that is compactible. Those exact words don't have to be used but it's a common problem he encounters.

Mr. Blackshare suggested adding "except construction debris" and **Mr. Keyes** felt that was closer to where we need to be. Mr. Lankford said we can look at the language in PEI RP1700 or reference PEI since it is a standard already in the rules. If it works, that is what we will do.

Mr. Blackshare asked if PEI RP1700 would go in this rule or the rule in Chapter 29. Mr. Lankford said PEI PR1700 is an incorporated standard already in Chapter 25 so it can go in this rule. He didn't know the specific wording and wanted to be sure it takes care of everyone's concerns. **Mr. Blackshare** felt removing "clean compactible backfill" and with the PEI standard incorporated in the rules now, it is clear what we want.

Mr. Darrough felt it would be good to reference the standard in the rule and **Mr. Keyes** felt it needed to be made clear in the rule. Mr. Lankford said the rule is enforceable now, but he will revise the language and try to get closer to address everyone's concerns. Ms. Strickland said we could email the revision, so everyone has an opportunity to review it before the next meeting.

Mr. Blackshare asked Justin to summarize what we are trying to say on the piping slope. Mr. Lankford said he'd received a lot of comments on the slope. Those against it felt a pressurized line is going to go to one of the containments. He agrees with that, but installers and testers have told him when they install a line and there is a slope, they cannot get the air out of it. If it goes up and down, there will be air pockets and you can't get a hydrostatic test. We do not want to leave it up to installers to install piping however they want. If the tank goes TOU and the fuel is drained out of the back end of the tank, it will be hard to put fuel back into the tank.

Mr. Keyes said the API standard tells you how to drain the lines before you pull a tank, and it works best if they're tapered back. Mr. Lankford agreed and said the sump in between the dispensers could go either way which he felt will help that issue. If you need to run the first dispenser back to the tank you could put in a transition sump and that will help with the depth of the tank. In a perfect world we would never have to test the lines, but people fall out of compliance sometimes and we will ask them to test the lines.

Mr. Blackshare asked if owners would be required to retrofit, and Mr. Lankford said no, this would be for new installations after the effective date of the rules. **Mr. Darrough** said this has been a rule for a while. Mr. Lankford said the 1/8" slope has been in the rule and has been allowed the way it is written, but we wanted to clarify it.

Mr. Blackshare said the effect of the rule change is essentially allowing the sump as an interim measure to slope back to them. Mr. Lankford said we are allowing them to slope either way between the dispensers. From the first dispenser back to the tank, it has to be sloped back towards the tank. It could go from the first dispenser back to a transition sump 1/8" and then from that transition sump, if you needed more so your tanks are not so deep, you could put in a transition sump. **Mr. Keyes** commented this is only trying to bring more clarity to the current rule. Mr. Lankford said that is the intent.

A commenter said while it is true air could get in the line, how many line failures are due to the presence of air. Lines are supposed to be blown back at the shear valve connection at the end of each piping run. **Mr. Darrough** said he felt the same. In other states where

they operate, they are not required to slope piping and they don't have installers complaining about not being able to get air out of the lines.

Mr. Lankford felt there is good reason for the slope. If air is in the line, your leak detector will not work, and it says this plainly in the installation of the leak detector. Leak detectors are required by EPA and we don't have a choice on pressurized lines. The commenter followed up and said we all want piping release detection that works. The concern is not regarding release detection other than the performance of STP sumps under increased burial depth.

Ken Beaty asked how many slope changes they could have. If you're going up and down between dispenser sumps, you essentially have the bellies and pockets we are trying to avoid.

Mr. Lankford asked **Mr. Beaty** what he thought needed to be changed. **Mr. Beaty** said probably only one slope change and **Mr. Keyes** felt that wasn't a bad idea. Mr. Lankford said he would like to discuss further and if everyone agreed with that suggestion, revise the language to get closer to what everyone wants.

Mr. Darrough asked **Mr. Beaty** to run through it again. **Mr. Beaty** said you don't want to have those additional bellies to create or hide air pockets, so if you go from your tank's STP sump, to dispenser 1 and 2, and you're sloping down dispenser 3 and 4, then back up between dispenser 5 and 6, you essentially have that belly at 3 and 4.

A commenter asked if the OCC would consider 1/8" every 3 feet. **Mr. Keyes** said that would definitely be a rule change. Mr. Lankford said he had never heard of that but understands they're trying to reduce burial depths. The commenter clarified the 1/8" slope from the nearest dispenser of each piping run may reduce tank burial depth depending on the proximity of the tanks to the dispensers. Air issues should be discovered before store ever opens. **Mr. Darrough** said he agreed with the commenter.

Mr. Darrough asked if staff has looked at PEI RP100. Mr. Lankford said the newest one says on suction and gravity you must have the 1/8" but it may not be necessary on pressurized lines. Mr. Lankford said he would like for it to be in the rule to some degree as some testers have complained about shear valves being installed up against the sumps and they can't hook up to the test ports. We feel that we have it to where things like that are not happening and we don't want to go backwards. **Mr. Darrough** said he understood that but from a risk perspective you would never put a station in operation that did not pass a test because of the air, you would not have a risk as that line could not be placed into service.

Mr. Keyes said at some point most gas station will probably have a leak in a product line. If the trench and the piping are sloped back to the tank, it will more likely run into the tank pit than it is to sit in a big puddle going down. The slope keeps it moving where it can be contained and that is just as important as the trapped air.

A commenter asked if this would be on brand new systems that are double walled, and Mr. Lankford said it would. He has been reaching out to people because he knew this might be an issue. He would like to get everyone on board, have a rule that is not hard to understand or enforce.

Terri Roberts asked if Justin had seen any changes in updated standards and codes that might affect how things are enforced. Mr. Lankford said they had not seen anything significant other than repairs to sumps.

A commenter asked if the OCC form will be updated if third party documentation on product line testing goes into effect. Mr. Lankford said one hour testing would be updated and changed to what it says in the rule.

Chapter 26 revisions:

165:26-1-21 will revoke an unnecessary rule since applicability is already in statute
165:26-1-31 will update adopted standards to the current edition
165:26-1-44 will revoke an unnecessary rule as the same language is duplicated in other rules in the Chapter (165:26-2-210 through 165:26-2-214)
165:26-2-8 will clarify that an air soap test is not required when installing a new AST if the interstice vacuum already meets requirements set by the tank manufacturer
165:26-4-21 will revoke an unnecessary rule since it is in statute (17 O.S. §311.A)
Appendix G will strike a word not in the rule referenced in the table

Mr. Boyle asked for any questions or comments on Chapter 26. There were no questions or comments.

Robyn Strickland said Mr. Lankford will send out rule revisions so they can be reviewed before the next STAC meeting. She said we have to meet in person for the Council to approve the changes and make a recommendation to move forward with a rulemaking.

The **fourth order of business** was the date and time of the next meeting. It was agreed the next meeting would be held on Tuesday, November 30, 2021, at 2:00 p.m.

Robert Keyes made a motion to adjourn and **Ken Beaty** seconded it. All members present approved the motion and the meeting adjourned at 3:07 p.m.

ATTESTED:

Susan Adlamini

Susan Adlamini
Acting Minutes Clerk for the Commission

OKLAHOMA CORPORATION COMMISSION
Notice of Public Meeting
Special Meeting

Notice is hereby given to all persons that the Storage Tank Advisory Council shall meet and conduct business as follows:

- Time, Day and Date:** 2:00 p.m., Tuesday, November 2, 2021
- Place:** Public Utilities Division (PUD) Conference Room
Jim Thorpe Office Building
2101 North Lincoln Boulevard, Room 580
Oklahoma City, Oklahoma 73105
- Purpose:** Review and discussion on draft proposed rules for the Petroleum Storage Tank Division
- Posting Division:** Judicial and Legislative Services
- Special Notice:** No vote or other Commission action is anticipated

AGENDA

Item	Topic
I	A. Call to order B. Election of Chair and Vice-Chair
II	Financial Report for the Petroleum Storage Tank Indemnity Fund
III	Discussion and comment on: <ul style="list-style-type: none"> • Chapter 15 Fuel Inspection Draft Proposed Rules • Chapter 25 Underground Storage Tanks Draft Proposed Rules • Chapter 26 Aboveground Storage Tanks Draft Proposed Rules
IV	Date and time for next meeting
V	Adjournment

All persons are invited to attend.

This notice was provided in writing to the Oklahoma Secretary of State at least 48 hours in advance of the scheduled meeting and also was posted prominently and publicly at the principal offices of the Oklahoma Corporation Commission at the Jim Thorpe Office Building, 2101 North Lincoln Boulevard, Oklahoma City, Oklahoma 73105 at 12:00 p.m. October 26, 2021.

STORAGE TANK ADVISORY COUNCIL MEETING
ATTENDANCE SHEET

November 2, 2021

DATE

Bad Ground - EFO

PRINT NAME

Bad Ground

SIGNATURE

Candae McGinnis

PRINT NAME

Candae McGinnis

SIGNATURE

Terri Roberts

PRINT NAME

Terri Roberts

SIGNATURE

PRINT NAME

SIGNATURE

DRAFT PROPOSED RULE CHANGES
STORAGE TANK ADVISORY COUNCIL
NOVEMBER 2, 2021

CHAPTER 15. FUEL INSPECION

**SUBCHAPTER 7. SPECIFICATIONS, STANDARDS, AND LABELING
FOR MOTOR FUELS**

165:15-7-5. Diesel fuel

The standard classification of diesel fuel, as described in ASTM D 975 and biodiesel as described in ~~52 O.S. §325~~ 17 O.S. §303, must be used.

SUBCHAPTER 13. LABELING OF TANKS AND PRODUCT LINES

165:15-13-1. General identification and color coding requirements

(a) All storage tanks subject to the rules of this Chapter must be marked with a tag, lettering, or other permanent marking on the fill neck and color coded on the ~~overfill sump tank fill~~ tank fill lids to identify the type, grade, or quality of regulated substance they contain in accordance with American Petroleum Institute (API) Recommended Practice 1637 color symbol system.

~~(b) East of 99 degrees west longitude, color coded markings must be:~~

- ~~(1) Unleaded motor fuel, 91 octane or above: red.~~
- ~~(2) Unleaded motor fuel, 89 or 90 octane: blue.~~
- ~~(3) Unleaded motor fuel, 86 through 88 octane: white.~~
- ~~(4) Diesel motor fuel: yellow.~~
- ~~(5) Kerosene: brown.~~
- ~~(6) Dyed diesel: half yellow, half red.~~
- ~~(7) Unleaded 87 octane E10: white with black "X" and a black border around lid.~~
- ~~(8) Premium unleaded 91 octane E10: red with black "X" and a black border around lid.~~
- ~~(9) E15: E15 tanks must be designated "E15" in black with a black border around lid, and the colors referenced above for unleaded motor fuel, 86 through 91 octane, should be used for the lid.~~
- ~~(10) Biodiesel: bronze with yellow and black border around lid.~~
- ~~(11) E85: orange with black "X" and a black border around lid.~~

~~(c) West of 99 degrees west longitude, color coded markings must be:~~

- ~~(1) Unleaded motor fuel, 90 octane or above: red.~~
- ~~(2) Unleaded motor fuel, 88 or 89 octane: blue.~~
- ~~(3) Unleaded motor fuel, 86 or 87 octane: white.~~
- ~~(4) Diesel motor fuel: yellow.~~
- ~~(5) Kerosene: brown.~~
- ~~(6) Dyed diesel: half yellow, half red.~~
- ~~(7) Unleaded 87 octane E10: white with black "X" and a black border around lid.~~
- ~~(8) Premium unleaded 91 octane E10: red with black "X" and a black border around lid.~~

~~(9) E15: E15 tanks must be designated "E15" in black with a black border around lid, and the colors referenced above for unleaded motor fuel, 86 through 91 octane, should be used for the lid.~~

~~(10) Biodiesel: bronze with yellow and black border around lid.~~

~~(11) E85: orange with black "X" and a black border around lid.~~

~~(d) Vapor recovery connections and manholes shall be marked with orange circles.~~

~~(e) Observation and monitoring wells shall be marked with a black triangle on a white background.~~

~~(f) At all facilities with more than one tank, the color coding applied to the fill cap or manhole cover shall extend beyond the edge of the cap or cover onto adjacent concrete or pavement.~~

~~(g) The tag labeling and color coding must be waterproofed and fuel proofed material so that the type, grade, or quality of the motor fuel is readily visible to persons adding to or taking a sample from the line or storage tank.~~

DRAFT PROPOSED RULE CHANGES
STORAGE TANK ADVISORY COUNCIL
NOVEMBER 2, 2021

CHANGES SINCE AUGUST 26, 2021 ARE HIGHLIGHTED

CHAPTER 25. UNDERGROUND STORAGE TANKS

SUBCHAPTER 1. GENERAL PROVISIONS

Part 3. Definitions

165:25-1-11. Definitions

"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.

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."

(B) Recommended Practice 1632, (R2010), "Cathodic Protection of Underground Storage Tank and Piping Systems."

(C) Recommended Practice 1604, (~~R2010~~ [4th Edition, 2021](#)), "Closure of Underground Petroleum Storage Tanks, Third Edition."

(D) Recommended Practice 1631, (~~2004~~ [R2001](#)), "Interior Lining and Periodic Inspection of Underground Storage Tanks."

(E) Recommended Practice 1621, (~~R2012~~ [R2020](#)), "Bulk Liquid Stock Control at Retail Outlets."

(F) Recommended Practice 1626, (2010), "Storing and Handling Ethanol and Gasoline - Ethanol Blends at Distribution Terminals and Service Stations."

(G) Recommended Practice 1627, (R2000), "Storing and Handling of Gasoline - Methanol/Cosolvent Blends at Distribution Terminals and Service Stations."

(H) Publication 1628, (1996), "A Guide to the Assessment and Remediation of Underground Petroleum Releases."

(I) Publication 2200, (2015), "Repairing Crude Oil, Liquefied Petroleum Gas, and Product Pipelines, Fourth Edition."

(J) Publication 2015, (2018), "Requirements for Safe Entry and Cleaning of Petroleum Storage Tanks."

(K) Recommended Practice 1637, (~~R2012~~ [4th Edition, 2020](#)), "Using the API Color Symbol System to Mark Equipment and Vehicles for Product Identification at Gasoline Dispensing Facilities and Distribution Terminals, Third Edition."

(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 ~~500-14~~ [500-19](#) (~~2014~~ [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." - **PUBLISHED DATE MAY BE IN 2022**
- [\(E\) 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[®], "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[®], 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®."
- (H) RP-R051, "Cathodic Protection Testing Procedures for STI-P3® 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, the following option may be used for pressurized piping. Product piping may change in direction between UDC'S. 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)~~(4) 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)~~(5) The tank pit must contain a smooth, evenly graded bed of manufacturer approved material extending the full length of the tank bottom.

~~(7)~~(6) The Licensed UST Installer must follow PEI RP-100 recommended practice for ballasting to prevent tank flotation during installation.

~~(8)~~(7) 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)~~(8) 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 at one and one-half times the operating pressure and tested in accordance with the testing devices third party certification. ~~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.~~
- (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 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. ~~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.~~

(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. After closure activities are completed, the excavation must be backfilled with clean compactable backfill material no later than seven (7) days upon completion of tank removal. Exceptions to backfilling within 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 1st 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 1st 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.

DRAFT PROPOSED RULE CHANGES
STORAGE TANK ADVISORY COUNCIL
NOVEMBER 2, 2021

CHANGES SINCE AUGUST 26, 2021 ARE HIGHLIGHTED

CHAPTER 26. ABOVEGROUND STORAGE TANKS

SUBCHAPTER 1. GENERAL PROVISIONS

Part 3. Scope of Rules

165:26-1-21. Overview of applicability [REVOKE]

~~This Chapter will apply to owners, operators, their employees and agents of aboveground storage tanks which PSTD is authorized to regulate pursuant to 27A O.S. (Supp. 1999) § 1-3-101 (E) (5) (b) and 17 O.S. §§ 301 et seq., which gives PSTD the responsibility of regulating aboveground storage tanks that contain regulated substances, including but not limited to, tanks from which these materials are dispensed into vehicles, or tanks used in wholesale or bulk distribution activities, as well as pumps, hoses, dispensers, and other ancillary equipment associated with the tanks, or the transport truck attached to it, whether above the ground or below. PSTD references the National Fire Protection Association 30 and 30A, Standard Number 30, 2018, "Flammable and Combustible Liquids Code" and Standard Number 30A, 2018, "Automotive and Marine Service Station Code". New editions of NFPA 30 and NFPA 30A supersede all previous editions.~~

Part 5. Standards and Codes

165:26-1-31. Codes and standards

(a) Specific references to documents listed below are made throughout the Aboveground Storage Tank Rules. Each of these documents or parts thereof is adopted and incorporated by reference as a standard. In the event these rules are in conflict with any of the standards set forth below, the provisions of these rules shall prevail. New editions of codes and standards supersede all previous editions. These codes and standards will be updated periodically through a formal rulemaking procedure initiated by PSTD to reflect any substantive or relevant changes. A copy is available for inspection at the Offices of the Petroleum Storage Tank Division during regular business hours.

(1) American National Standards Institute (ANSI) Standards: American Society of Mechanical Engineers (ASME):

(A) ASME B31.3-2016 **2020**, "Process Piping."

(B) ASME B31.4 2016 **2019**, "Pipeline Transportation Systems for Liquids and Slurries."

(2) American Petroleum Institute (API) Standards:

(A) API RP 652, "Lining of Aboveground Petroleum Storage Tank Bottoms," ~~Second Edition, April, 2014~~ **Fifth Edition, 2020**.

(B) API 1628 SET, "A Guide to the Assessment and Remediation of Underground Petroleum Releases."

- (C) API 653, "Tank Inspection, Repair, Alteration, and Reconstruction, 2018:"
[Fifth Edition, Addendum 1 \(2018\), Addendum 2 \(2020\), and Errata 1 \(2020\).](#)
- (3) American Society for Testing and Materials (ASTM) Standards: ASTM E1739-95 (2015), "Standard Guide for Risk-Based Corrective Action Applied at Petroleum Release Sites."
- (4) National Association of Corrosion Engineers (NACE) Standards: NACE SP0169-2013, "Control of External Corrosion on Underground or Submerged Metallic Piping Systems."
- (5) National Fire Protection Association (NFPA) Standards:
 (A) Standard Number 30, ~~2018~~ 2021, "Flammable and Combustible Liquids Code."
 (B) Standard Number 30A, ~~2018~~ 2021, "Motor Fuel Dispensing Facilities and Repair Garages."
- (6) Underwriter's Laboratory (UL) Standards:
 (A) Standard UL142, ~~2006~~ 2019, "Steel Aboveground Tanks for Flammable and Combustible Liquids."
 (B) Standard UL842, ~~2015~~ 2020, "Valves for Flammable Fluids."
 (C) Standard UL971, 2011, "Nonmetallic Underground Piping for Flammable Liquids."
- (7) Petroleum Equipment Institute: ~~Publication PEI/RP 200-13, "Recommended Practices for Installation of Aboveground Storage Systems for Motor Vehicle Fueling-" (2013 Edition)~~
(A) RP 200-19, "Installation of Aboveground Storage Systems" (2019 Edition)
(B) RP 1000-14, "Marina Fueling Systems" (2014 Edition)
- (8) "Spill Prevention, Control and Countermeasure Regulation," 40 CFR 112
- (b) The standards set forth in (a) of this Section are also available from the following sources:
- (1) American National Standards Institute (ANSI), Thirteenth Floor; 11 West 42nd Street, New York City, New York, 10036; Telephone: (212) 642-4900.
- (2) American Society of Mechanical Engineers (ASME), Three Park Ave., 23S2, New York, NY 10016-5990; Telephone (800) 843-2763.
- (3) American Petroleum Institute (API), Publications and Distribution, 1220 "L" Street, N.W., Washington, D.C. 20005-4070; Telephone (202) 682-8000.
- (4) American Society for Testing and Materials (ASTM), 100 Bar Harbor Drive, West Conshohocken, Pennsylvania 19428-2959; Telephone (610) 832-9585.
- (5) National Association of Corrosion Engineers (NACE), 1440 South Creek Drive, Houston, Texas 77084; Telephone (281) 492-0535.
- (6) National Fire Protection Association (NFPA), 1 Batterymarch Park, Quincy, Massachusetts 02269-9101; Telephone (800) 344-3555.
- (7) National Groundwater Association (NGWA), 601 Dempsey Road, Westerville, Ohio 43081; Telephone (614) 898-7791.
- (8) Underwriter's Laboratory (UL), 333 Pfingsten Road, Northbrook, Illinois 60062; Telephone (847) 272-8800, extension 2612.
- (9) Petroleum Equipment Institute, P.O. Box 2380, Tulsa, Oklahoma, 74101-2380; Telephone (918) 494-9696.

Part 7. Notification and Reporting Requirements

165:26-1-44. Tank closure or change in service [REVOKE]

~~Owners of aboveground storage tank systems must notify PSTD at least fourteen (14) days prior to the removal of the aboveground storage tanks and/or lines by submitting the PSTD scheduling form and receiving confirmation of the scheduled removal from PSTD. If events require the owner to change the date of removal, the Division should be given forty eight (48) hours notice of the new date. An authorized agent of PSTD may be present to observe the removal operations and to inspect the closed tank system and the surrounding environment. Any company that removes aboveground storage tank systems must have an AST Licensee on the jobsite during removal. All UST's currently being used as AST's must be destroyed upon closure. A certificate of destruction must be included with the AST Closure Report and submitted to PSTD within forty five (45) days of closure.~~

SUBCHAPTER 2. GENERAL REQUIREMENTS FOR ABOVEGROUND STORAGE TANK SYSTEMS

Part 1. Design and Installation

165:26-2-8. Installation testing

(a) A tightness test must be completed on tank and lines during construction and before being put into service after the lines have been covered.

(1) All aboveground storage tanks must be tested to manufacturers instructions. Single-wall tanks shall be air tested, soaped, and inspected for bubbling prior to installation.

Double-wall tanks with a vacuum on the interstice:

(A) Check vacuum gauge to determine if the vacuum meets all minimum requirements set by the tank manufacturer. An air soap test is not required if the interstice vacuum meets tank manufacturer requirements.

(2) Aboveground product piping shall be subjected to an air test of at least 50 psi. The test must have a duration of not less than 60 minutes. All piping joints must be soaped while the system is under pressure, in order to detect any possible leaks. The interstice area of double-wall piping must be tested according to the manufacturer's instructions.

(3) All suction product piping must be tested while disconnected from the pumps, and dispensing units. The piping must be subjected to an air test of at least 50 psi. The test must have a duration of not less than 60 minutes. All piping joints must be soaped while the system is under pressure, in order to detect any possible leaks. The interstice area of double-wall piping must be tested according to the manufacturer's instructions

(4) All pressurized piping must be tested while connected to tanks, pumps and dispensing units if installed at the time of installation. The piping must be subjected to an air test of at least 50

psi. The test must have a duration of not less than 60 minutes. All piping joints must be soaped while the system is under pressure, in order to detect any possible leaks. The interstice area of double-wall piping must be tested according to the manufacturer's instructions.

(5) All piping should be air tested and monitored continuously during the installation.

(6) All underground pressurized and suction piping must have a precision tightness test performed after all paving over the piping has been completed and before the system

is placed in operation. The precision tightness test must be performed by a certified tester, and in accordance with manufacturer's instructions. The product line(s) must be hydrostatic 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.

(7) Mechanical and electronic leak detector(s) must be tested for function by simulating a leak and operate in accordance with manufacturer's instructions.

(8) 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. 3gph, 0.2gph, and 0.1gph).

(9) Containment sumps must be tested after all piping and conduit has been installed 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 21. REMOVAL AND CLOSURE OF ABOVEGROUND STORAGE TANK SYSTEMS

165:26-2-212.1. Requirements for returning to service

(a) All tanks out of service for more than twelve (12) months are required to be ~~pressure and soap~~ **tightness** tested and test results submitted to PSTD before returning to service.

(b) A tightness test must be performed by a certified tester and must be completed on the underground portion of out of service systems if more than twelve (12) months have elapsed since the last tightness test. Any system failure will require either closure or upgrade of the failed portion.

(c) All systems out of service for more than twelve (12) months are required to meet all the requirements of this Chapter.

(d) All underground storage tanks being used as aboveground storage tanks that have been out of service for more than twelve (12) months may not be returned to service.

SUBCHAPTER 3. RELEASE PREVENTION AND DETECTION REQUIREMENTS

PART 17. RELEASE INVESTIGATION

165:26-3-171. Release investigation and confirmation

(a) This Section applies to the investigation of all reportable releases unless PSTD staff specifically waives any part of this Section in writing.

(b) Owners and/or operators must immediately investigate and confirm all suspected releases of regulated substances requiring reporting under this Chapter within 7 days of receipt of notice from PSTD, using the following steps or another procedure approved by PSTD:

(1) **System test.** Owners and/or operators must conduct tightness tests that determine whether a leak exists in the storage tank system.

(A) Owners and/or operators must repair, remove or replace the aboveground storage tank system and begin investigation in accordance with (b)(2) of this Section if the test results for the system, tank, or delivery piping indicate that a leak exists.

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

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

(2) **Site check.** Owners and/or operators must measure for the presence of a release where regulated substances are most likely to be present at the aboveground 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 5 feet (5') from the outside of the AST 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 performed by a PSTD Licensed Environmental Consultant.

(A) If the test results for soil and/or groundwater taken outside the excavation zone or the aboveground 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 aboveground 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 PSTD, after which corrective action may be required under the provisions of Chapter 29 of Commission rules.

SUBCHAPTER 4. INSPECTIONS, NOTICES OF VIOLATION, FIELD CITATIONS AND FORMAL ENFORCEMENT ACTIONS

Part 7. Penalties

165:26-4-21. Penalties

(a) Pursuant to 17 O.S. § 311(A), any person who violates any of the provisions of this Chapter shall be liable for an administrative penalty or 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 may appear at the hearing at the Commission. If found in violation of PSTD rules at the time the Commission order is issued, the person must pay the amount of the fine, as well as an administrative cost of \$250.00.

APPENDIX G. FINE CITATIONS TABLE

General Leak Detection Requirements		
165:26-1-55 165:26-1-58	Failure to maintain records of release or leak detection monitoring	\$250
165:26-1-56	Failure to retain records of calibration, maintenance, and repair of release or leak detection equipment	\$250
165:26-3-19 165:26-3-20	Failure to provide adequate release or leak detection for storage tank system	\$250
	Second Offense	\$500
	Third Offense	\$1,000
165:26-3-20	Failure to monitor tank(s) for releases as required	\$250
165:26-3-20.1	Failure to use approved release or leak monitoring method for tank	\$250
165:26-3-20.1 165:26-3-20.2	Failure to use approved release or leak monitoring method for piping	\$250