

**TITLE 165. CORPORATION COMMISSION
CHAPTER 26. ABOVEGROUND STORAGE TANKS
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SUBCHAPTER 1. GENERAL PROVISIONS

PART 1. PURPOSE AND DEFINITIONS

165:26-1-1. Purpose

The purpose of this Chapter is to provide a regulatory program for the safe operation of aboveground storage tanks in Oklahoma and to prevent and contain pollution caused by leaking aboveground storage tank systems and to reduce the hazards of fire and explosion. It is recommended that all aboveground storage tanks, whether regulated by these rules or not, follow the NFPA guidelines, including NFPA 30 and 30A.

165:26-1-2. Definitions

In addition to the terms defined in 17 O.S. § 301 et seq., the following words or terms, when used in this Chapter, shall have the following meaning unless the context clearly indicates otherwise:

"Aboveground storage tank" or **"AST"** means any stationary tank not included within the definition of a petroleum storage tank in OAC 165:25-1-11, which is designed to contain any PST regulated substances without structural support of earthen material.

"Aboveground storage tank system" means an aboveground storage tank and any connected aboveground or underground piping, dispensers and associated equipment and fixtures.

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

"Airports" mean landing facilities for aircraft which 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.

"Ancillary equipment" means any device including, but not limited to: devices, such as piping, fittings, flanges, valves, and pumps that are used to distribute, meter, or control the flow of regulated substances to or from an petroleum storage tank.

"ATG" means automatic tank gauging.

"Backfill" is the material that is placed in a tank and/or piping excavation to support and separate the tank and/or piping, from the natural environment.

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

"Bulk plant" means 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 distributing them by a tank vessel, pipeline, 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 discontinuing use of the petroleum storage system for purposes regulated by PSTD.

"Commission" or **"OCC"** means the Oklahoma Corporation Commission and includes its designated agents or representatives.

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

"Construction tank" means a fuel tank used for less than 12 months at a construction site.

"Division" means the Petroleum Storage Tank Division (PSTD) of the Corporation Commission.

"EPA" means the United States Environmental Protection Agency.

"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.

"Fire protected tank" means an aboveground storage tank that is listed in accordance with UL 2085, *Standard for Insulated Aboveground Tanks for Flammable and Combustible Liquids*, or an equivalent test procedure that consists of a primary tank provided with protection from physical damage and fire-resistive protection from exposure to a high-intensity liquid pool fire.

"Fire resistant tank" means a UL listed aboveground storage tank that provides fire-resistant protection from exposures to a high intensity liquid pool fire.

"Fleet and Commercial" means any facility that uses aboveground storage tanks to store regulated substances for use in its own vehicles or equipment. This definition extends to facilities that provide oil change and lube services to consumers.

"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.

"Fund" means the Petroleum Storage Tank Indemnity Fund.

"Generation facilities" means those tanks that are permanently installed, which routinely contain fuel to be used in emergency generators in the event of a power failure.

"Impervious barrier" means a barrier of sufficient thickness, density, and composition that it is impenetrable to the regulated substance, has a permeability of at least 1×10^{-6} cm/sec., and will prevent the discharge to the environment of any regulated substance for a period of at least as long as the maximum anticipated time during which the regulated substance will be in contact with the impervious material.

"In service" means a petroleum storage tank that contains a regulated substance, and/or has a regulated substance added to or withdrawn from it.

"Marina" means any fuel storage facility located by the water for the purpose of fueling watercraft.

"Pier" means dock, floating dock, and wharf.

"Positive sampling, testing, or monitoring results" means the results of sampling, testing or monitoring using any of the release detection methods described in this Chapter that indicate that a release from an petroleum storage tank system may have occurred.

"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 attached to the airstrip owner's residential property and used only by the owner.

"PSTD" means Petroleum Storage Tank Division.

"Public Utility" means any entity providing gas, electricity, water, or telecommunications services for public use.

"Regulated substances" means antifreeze, motor oil, motor fuel, gasoline, kerosene, diesel or aviation fuel. It does not include compressed natural gas.

"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 petroleum storage tank system and its secondary barrier.

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

"Responsible person" means a person other than a petroleum storage tank system owner or operator, such as an adjacent property owner, impacted party, or city, seeking corrective action of real property, and submits itself to the jurisdiction of the Commission.

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

"Sacrificial anode" means a device to reduce or prevent corrosion of a metal in an electrolyte by galvanic coupling to a more anodic metal.

"Secondary containment" means a system installed around a petroleum storage tank or system that is designed to prevent a release from migrating beyond the secondary containment system outer wall (in the case of a double-walled tank system) or excavation area (in the case of a liner or vault system) before the release can be detected. Such a system may include, but is not limited to, impervious barriers (both natural and synthetic), double walls, or vaults.

"TPH" means total petroleum hydrocarbons.

"Tank tightness testing" or **"precision testing"** means a procedure for testing a petroleum storage tank system's ability to prevent an inadvertent release of any stored regulated substances into the environment.

"Temporary closure" or **"TOU"** means the status of a petroleum storage tank system that has been taken out of service but not removed.

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

"Vault" means an enclosure consisting of four walls, a floor, and a top for the purpose of containing a liquid storage tank and not intended to be occupied by personnel other than for inspection, repair, or maintenance of the vault, the storage tank, or related equipment.

PART 3. SCOPE OF RULES

165:26-1-21. Overview of applicability

This Chapter will apply to owners and operators 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, whether above the ground or below, excluding tanks at refineries or at the upstream or intermediate shipment points of pipeline operations, and excluding compressed natural gas whether used as a motor fuel or not. PSTD references the National Fire Protection Association 30 and 30A, Standard Number 30, 2003, "Flammable and Combustible Liquids Code" and Standard Number 30A, 2003, "Automotive and Marine Service Station Code". New editions of NFPA 30 and NFPA 30A supersede all previous editions.

165:26-1-22. Exclusions

(a) The following classes of aboveground storage tanks or systems are specifically excluded from all provisions of this Chapter:

(1) All tanks used in the exploration or production of oil and gas, including well service equipment and natural gas compression facilities. These activities are regulated by the Commission's Oil and Gas Conservation Division and by the Pipeline Safety Department.

(2) All mobile or temporary tanks used at construction sites.

(3) All farm and ranch tanks.

(4) All tanks used by public utilities in the generation of electric power for public use.

(5) All tanks used by manufacturers in the production of goods.

(b) These exclusions do not extend to permanently located fuel storage tanks used to fuel company vehicles, even though the vehicles may be driven to production or construction sites.

PART 4. ADMINISTRATIVE PROVISIONS

165:26-1-25.1. Citation of rules

This Chapter will be known as the Oklahoma Corporation Commission's General Rules and Regulations Governing Aboveground Storage Tanks and are to be cited as OAC 165:26.

165:26-1-26. Hearings, orders and appeals

(a) The Commission will issue orders as necessary to enforce the provisions of this Chapter to protect property, human health and safety, and the environment.

(b) Hearings to enforce or appeal enforcement of the provisions of this Chapter will be done in accordance with the Commission's Rules of Practice, OAC 165:5.

165:26-1-27. Changes to rules [REVOKED]

165:26-1-28. Variances

A variance to a provision of this Chapter may be granted by the Commission after application, notice and hearing.

165:26-1-29. Notices

Notices, applications and reports may be submitted faxed or sent to: Oklahoma Corporation Commission, Petroleum Storage Tank Division, Jim Thorpe Office Building, Room 241, P.O. Box 52000, Oklahoma City, Oklahoma 73152-2000, (405) 521-4683, or toll free at 1-800-621-5878, fax number (405) 521-4945.

165:26-1-30. Severability

If any part of this Chapter is ruled invalid, by a court of competent jurisdiction, the remainder of the Chapter will remain in full force and effect.

165:26-1-30.2. Consultation of Petroleum Storage Tank Division

At a tank owner's request, PSTD will confer with a tank owner planning a new installation or a reconfiguration of an existing installation to assure the tank owner of compliance.

165:26-1-30.3. Licensing procedure for aboveground storage tank licensee [RENUMBERED TO 165:26-1-110]

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) Standard B31.3, 1999 2004, "Chemical Plant and Petroleum Refinery Piping".

(B) Standard B31.4, 1998 2002, "Liquid Transportation Systems for Hydrocarbons, Liquid Petroleum Gas, Anhydrous Ammonia and Alcohols".

(2) American Petroleum Institute (API) Standards:

(A) Recommended Practice 652, "Lining of Aboveground Petroleum Storage Tank Bottoms", Second Edition, April, 1997.

(B) Publication 1628, 1996, "A Guide, The Assessment and Remediation of Underground Petroleum Releases".

(3) American Society for Testing and Materials (ASTM) Standards: Standard E 1739-95, 1995, "Standard Guide for Risk-Based Corrective Action Applied at Petroleum Release Sites".

(4) National Association of Corrosion Engineers (NACE) Standards: Standard Number RP-0169-96, "Control of External Corrosion on Underground or Submerged Metallic Piping Systems".

(5) National Fire Protection Association (NFPA) Standards:

- (A) Standard Number 30, 2003, "Flammable and Combustible Liquids Code".
- (B) Standard Number 30A, 2003, "Automotive and Marine Service Station Code".
- (6) Underwriter's Laboratory (UL) Standards:
 - (A) Standard UL142, 1987 2002, "Steel Aboveground Tanks for Flammable and Combustible Liquids".
 - (B) Standard UL842, 1980 1999, "Valves for Flammable Fluids".
 - (C) Standard UL971, 2005, "Nonmetallic Underground Piping for Flammable Liquids
- (7) Petroleum Equipment Institute: Publication PEI/RP 200-03, "Recommended Practices for Installation of Aboveground Storage Tank Systems for Motor Vehicle Fueling".
- (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 (NWWA), 601 Dempsey Road, Westerville, Ohio 43081; Telephone (614) 898-7791.
 - (8) Underwriter's Laboratory (UL), 333 Pflingsten 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.

165:26-1-32. Other standards and regulations [REVOKED]

165:26-1-33. Local jurisdiction

Local jurisdictions, including but not limited to municipalities or rural fire districts, are allowed to adopt their own codes regarding aboveground storage tanks as long as they do not conflict with and are at least as stringent as the state's rules. Some local jurisdictions may prohibit aboveground storage tanks through zoning and/or ordinances.

PART 6. FINANCIAL RESPONSIBILITY

165:26-1-36. Financial responsibility

(a) This Subchapter applies to owners and operators of all petroleum aboveground storage tank (AST) systems except as otherwise provided in this Section.

(b) State and Federal government entities whose debts and liabilities are the debts and liabilities of a state or the United States are exempt from the requirements of this Subchapter.

(c) The requirements of this Subchapter do not apply to owners and operators of any AST system described in 165:26-1-22, "Exclusions."

(d) If the owner and operator of a petroleum aboveground storage tank are separate persons, only one person is required to demonstrate financial responsibility; however, both parties are liable in event of noncompliance.

(e) An owner or operator may satisfy the requirements of this Subchapter by use of the Indemnity Fund. There is a deductible for use of this mechanism and for which compliance may be demonstrated by use of any of the mechanisms listed in 165:26-18-3. For releases that occurred before June 4, 2004 the deductible is \$5,000; for releases that occurred after June 4, 2004 the deductible is 1% of fund expenditures not to exceed \$5,000.

165:26-1-37. Evidence of financial responsibility

Owners and operators of AST systems will provide evidence of financial responsibility through the mechanisms set forth below, or any other mechanism that is pre-approved by the Division Director of PSTD:

- (1) Self insurance
- (2) Guarantee
- (3) Insurance
- (4) Surety bond
- (5) Letter of Credit
- (6) Trust fund or standby trust fund
- (7) Securities pledge
- (8) Cash or cash equivalent pledge

PART 7. NOTIFICATION AND REPORTING REQUIREMENTS

165:26-1-41. General reporting requirements

PSTD may require owners and operators of aboveground storage tank systems to provide information it deems necessary for the protection of human health, the environment and to assure the safety of people and property. Use of the designated PSTD form(s) is required for scheduling, tank registration, change in ownership, monthly release detection, testing, temporary change in service, permanent closure, or return to service. These forms are available at the OCC website, PST Division webpage: www.occeweb.com follow link to Petroleum Storage Tank Division and link to PST Compliance Forms.

165:26-1-42. New tank systems

(a) Owners of all aboveground storage tanks regulated pursuant to this Chapter must notify PSTD of the existence of their tanks if the tanks are covered by these rules and have not already been registered. The notice must be on a form prescribed by PSTD (Form 7530 Registration for Petroleum Storage Tanks) and specify, at a minimum, the date of installation if known, the location, type of tank construction and piping

construction, size of tank installed, the type of release detection method utilized, type of secondary containment, and type of regulated substance being stored unless otherwise specified. Thereafter, owners must notify the PSTD of new tanks within 30 days of tank installations by application of Form 7530.

(b) Persons intending to install a new aboveground storage tank and/or new aboveground or underground piping must give the PSTD notification of the installation at least 24 hours before the tank and/or lines are to be installed by submitting the PSTD scheduling form. If events require the owner to change the date of installation, the Division should be given 48 hours notice of the new date.

(c) Upon receipt of the scheduling form an authorization letter giving temporary approval to receive fuel into an un-permitted tank will be sent to the owner. This letter will expire 90 days after the date of issuance. After the tank installation is complete, the PSTD registration form must be submitted with copies of the installation testing.

(d) Owners and AST Licensees must certify on the PSTD Registration form that the installation of tanks and piping meet the requirements of this Chapter.

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

Owners of aboveground storage tank systems must notify PSTD at least 14 days prior to the removal of the aboveground storage tanks and/or lines by submitting the PSTD scheduling form. If events require the owner to change the date of removal, the Division should be given 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.

165:26-1-47. Transfer of ownership

When the owner of an aboveground storage tank transfers ownership of the facility or tank to another person, the new owner must notify the Commission within 30 days of the transfer. The notice must specify at a minimum, the name of the new owner, the location of the facility and the date of the transfer of ownership. In addition, the former owner must advise PSTD of the name and address of the new owner.

165:26-1-48. Tank and line tightness testing

(a) Tank and line tightness test results in which any part of the tank system tested does not pass must be reported to PSTD within 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 the testing.

(b) Hydrostatic line tightness tests must be conducted in accordance with and reported on the prescribed PSTD form.

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

PART 9. RECORDKEEPING

165:26-1-55. Availability of records

(a) Owners and operators of regulated aboveground storage tank systems must

cooperate with PSTD requests for submission of inventory and monitoring records. All leak detection records, including sampling, testing, inventory and monitoring records must be available for each tank for at least the preceding twelve months. Copies of all records required pursuant to this Chapter must be kept at the facility and available for immediate inspection by the PSTD Fuel Specialist or be readily available upon request.

(b) Failure to have the required records available when requested by PSTD may result in an enforcement action.

(c) Release detection records must be maintained on forms specified by PSTD.

(d) When a change in an owner or operator of a petroleum storage tank system occurs, all records required by PSTD must be transferred at no cost to the new owner or operator.

(e) Each owner/operator must provide written notice of any address change within 30 days to the PSTD office.

165:26-1-56. Repair records

Owners and operators of regulated aboveground storage tank systems must maintain records that identify the location and nature of the repair, including documentation regarding the repair. These records must be kept for the remaining operating life of the storage tank system.

165:26-1-57. Tank installation, closure and removal records

(a) Owners and operators of aboveground storage tank systems must maintain records regarding the installation for the lifetime of the system; or, at the owner's option, give copies of installation records to PSTD for retention in the Division's files. Owners who have purchased systems must maintain the installation information if it is available.

(b) Owners and operators of aboveground storage tank systems must maintain records capable of demonstrating compliance with the closure and removal requirements for tanks that are temporarily taken out of service or permanently removed.

(c) The owner or the owner's representative (as directed by the owner) must submit the PSTD Closure Report Form and all required attachments to PSTD within 45 days from the date the tanks are permanently closed.

165:26-1-58. Release detection and corrosion protection records

(a) Owners and operators of regulated aboveground storage tank systems must maintain release detection records for a minimum of one year.

(b) Owners and operators of regulated aboveground storage tank systems who use cathodic protection ("CP") must maintain the following records:

(1) Original cathodic protection design created in accordance with National Association of Corrosion Engineers (NACE) recommended practices with drawings depicting all of the CP system components and a description of the materials used.

(2) Suitability study performed to determine if a tank could be upgraded with corrosion protection.

(3) Rectifier readings for impressed current systems conducted at least every 60 days.

(4) Results of the last three inspections or CP system tests completed by a corrosion tester.

165:26-1-59. Spill and overfill records

Owners and operators of aboveground storage tank systems must keep records of spills and overfills for review and inspection by PSTD for a period of 3 years.

165:26-1-60. Piping records

Tank owners must maintain a current map of their underground piping if that information is available to them and update it within 30 days of any changes.

165:26-1-61. Inventory records [REVOKED]

PART 11. FEES

165:26-1-70. Fees

This Chapter requires the following persons to pay fees according to the schedule set out in 165:5-3-2.

- (1) Owners or operators of all aboveground storage tank systems in use during the fiscal year.
- (2) AST licensees who become licensed pursuant to the provisions of this Chapter.

PART 13. SHUTDOWN OF OPERATIONS

165:26-1-90. Shutdown of operations

- (a) The PSTD may close (shut down) a system:
 - (1) If the system poses an imminent threat to health, safety, or the environment.
 - (2) If the owner or operator is operating tanks for which permit fees have not been paid.
 - (3) If the owner or operator fails to comply with a Commission order.
 - (4) For failure to properly operate and/or maintain leak detection, spill, overfill, or corrosion equipment if the owner/operator has been issued a written notice of violation and has failed to take corrective action.
 - (5) Failure to protect a buried metal flexible connector from corrosion if the owner/operator has been issued a written notice of violation and has failed to take corrective action.
- (b) The PSTD must close (shut down) a system:
 - (1) If required spill prevention equipment is not installed.
 - (2) If required overfill protection equipment is not installed.
 - (3) If required leak detection equipment is not installed.
 - (4) If required corrosion equipment is not installed.
 - (5) If 2" or more of water is found in the tank.
 - (6) If meter is found to be off in calibration by more than 19 cubic inches per every 5 gallons.
- (c) Only PSTD designated employees have the authority to lock or seal dispensers and/or fill pipes of any system violating subsection (a) or (b) of this Section. The PSTD employee must explain to the owner or operator the reason the AST system is being locked or sealed.

- (d) The PSTD “Out of Order” tag attached to each fill pipe of the tank(s) in violation shall serve to clearly identify the tank(s) as ineligible for delivery, deposit, or acceptance of product. Tank owners/operators and product deliverers are responsible for ensuring that product is not delivered into the tagged tank(s).
- (e) Owners, operators, or any persons who remove a lock or seal without permission from PSTD will be subject to penalties imposed by this Chapter, or formal enforcement proceedings.
- (f) Upon confirmation that the AST system no longer poses an imminent threat to health, safety, or the environment, permit fees paid, violation(s) corrected, or Commission order requirements satisfied, the authority to remove a lock or seal by the owner or operator may be obtained as follows:
- (1) Verbal or written permission from the PSTD employee who placed the lock or seal on the device; or
 - (2) Verbal or written permission from the Manager of Compliance and Inspection; or
 - (3) Application to and order of the Commission.
- (g) If a facility is closed under the provisions of this Section, the owner or operator of the facility will be afforded a hearing within ten (10) days of receipt by PSTD of the owner's or operator's application for a hearing.

PART 15. LICENSING PROCEDURES

165:26-1-110. Licensing procedure for aboveground storage tank licensee

- (a) Any individual who would like to become an aboveground storage tank licensee must:
- (1) Complete an application form.
 - (2) Provide sufficient proof of 2 years' related work experience, and of active participation in the completion of 3 aboveground storage tank handling activities, 2 of which must be installations.
 - (3) Pass an examination administered by PSTD.
 - (4) Pay fees for applications, examinations, and licensing according to the schedule provided in OAC 165:5-3-2.
 - (5) Certify that they will comply with all PSTD rules and requirements for aboveground storage tanks.
- (b) All examinations and licensing procedures must be completed within one (1) year of approval of the application. Failure to complete will result in forfeiture of fees and will require a new application and appropriate fees.
- (c) Continuing education is required to maintain an AST license; this consists of four hours of continuing education through a Commission approved program every two years.
- (d) PSTD shall have the responsibility to deny, suspend, refuse to renew or revoke the license, or reprimand any aboveground storage tank installer who is found guilty of:
- (1) The practice of any fraud or deceit in obtaining a license or in performing work pursuant to this Chapter.
 - (2) Any gross negligence, incompetence or misconduct in installation work performed pursuant to this Chapter.
 - (3) Knowingly making false statements or signing false statements, certificates or

affidavits to PSTD or to clients with the intention to induce payment.

(4) Aiding or assisting another person in violating any provision of this Chapter.

(5) Signing a verification statement for work performed pursuant to this Chapter which was not performed by the aboveground storage tank licensee.

(6) Engaging in dishonorable, unethical or unprofessional conduct of a character likely to deceive, defraud or harm a customer or the public.

(7) Being under indictment or convicted for a criminal act.

(e) Prior to any license suspension, revocation, or refusal to renew, the Director of the PSTD shall have the matter investigated and a report made to the Director for consideration. If the Director elects to pursue suspension, revocation, or refusal to renew, PSTD will schedule a hearing before an Administrative Law Judge and the licensee will be officially notified. The burden of substantial evidence rests upon PSTD.

(f) This Section in no way exempts the aboveground storage tank licensee from having to meet other applicable requirements as set by state and federal statutes and regulations from other state and federal agencies.

(g) Any person who holds an AST license may install or remove AST systems.

PART 17. OPERATOR TRAINING

165:26-1-130. Training requirements

Each aboveground storage tank system or group of aboveground storage tank systems at a facility may have a Class A, Class B, and Class C operator designated. Separate individuals may be designated for each class of operator or an individual may be designated to more than one of the operator classes.

165:26-1-132. Operator Class designations

(a) A Class A operator has primary responsibility to operate and maintain the aboveground storage tank system in the broader aspects of the statutory and regulatory requirements to achieve and maintain compliance.

(b) A Class B operator implements applicable requirements and standards for one or more facilities to monitor day-to-day aspects of operation and recordkeeping.

(c) A Class C operator is an onsite employee responsible for responding to alarms or emergencies caused by spills or release from underground storage tank systems.

SUBCHAPTER 2. GENERAL REQUIREMENTS FOR ABOVEGROUND STORAGE TANK SYSTEMS

PART 1. DESIGN AND INSTALLATION

165:26-2-1.1. Aboveground storage tank installation

All tanks, piping, and associated equipment used in conjunction with a AST installation shall be installed by personnel possessing appropriate skills, experience, and required PSTD license to complete the installation in accordance with recognized industry standards and this Chapter. An AST licensee must be present at all times

during the installation.

165:26-2-1.2. Compatibility [REVOKED]

165:26-2-1.3. Approved tanks, tank design

- (a) The material and construction of the tank must be compatible with the material stored and the conditions of storage such as pressure and temperature.
- (b) Underground tanks installed for aboveground use prior to July 1, 2007 may be used if installed inside secondary containment.
- (c) Only tanks designed for aboveground use may be installed aboveground after July 1, 2007.

165:26-2-2. Emergency pressure release [REVOKED]

165:26-2-3. Aboveground storage tank spacing

Spacing (shell to shell) between any two adjacent aboveground tanks for tanks storing Class I, II, or IIIA stable liquids must be according to the table in Appendix H. The minimum distance between tanks shall be no less than 3 feet. Variances can be made by PSTD for pre-existing facilities where deviation from these rules does not pose a serious hazard to people or property.

165:26-2-4. Distance to be kept around tanks

- (a) The following distances, at a minimum, must be kept around aboveground storage tanks.
 - (1) 50 ft (15 meters) from the nearest important building on the same property;
 - (2) 50 ft (15 meters) from any fuel dispenser;
 - (3) 50 ft (15 meters) from the nearest side of a public way; and
 - (4) 100 ft (30 meters) from any property line that is or might be built upon, including the opposite side of a public way.
- (b) The distances as set forth in (a) of this may be reduced by 50 percent if the tanks are fire-resistant. The distances as set forth in (a) may be further reduced if the tanks are a fire-protected type aboveground tank or tanks in vaults as per NFPA 30A-4.3.2.4.
- (c) A variance may be granted for pre-existing facilities where compliance would be difficult and expensive and the current distances between tanks, property lines or dispensers pose no serious threat to people or property.

165:26-2-5. Requirements on fill pipes

- (a) Each fill pipe must be identified by a tag or other marking to identify the product for which the tank is used. The marking must be maintained in legible condition throughout the life of the tank. Color-coding may also be used in addition to marking.
- (b) If the fill pipe is located within the containment dike a spill bucket is not required.

165:26-2-5.1. General spill and overflow prevention requirements

- (a) Owners and operators of aboveground storage tank systems, as well as those who transport regulated substances to these systems must do everything reasonably possible to ensure that releases due to spilling and overflowing do not occur.

(b) Tanks with a fill pipe must be filled through a liquid tight connection mounted inside at least a 5 gallon spill container. A spill bucket is not required if the fill pipe is located within the containment dike. Where an aboveground tank is filled by means of fixed piping, either a check valve and shutoff valve with a quick-connect coupling or a check valve with a dry-break coupling shall be installed in the piping at a point where connection and disconnection is made inside the spill containment between the tank and the delivery vehicle. This device shall be protected from tampering and physical damage.

(c) One of the following methods must be used to prevent overfilling.

- (1) High liquid level alarms with an audible or visual signal at a constantly attended operation or surveillance station.
- (2) High liquid level pump cutoff devices set to stop flow at a predetermined container content level.
- (3) Direct audible or code signal communication between the container gauger and the pumping station.
- (4) A fast response system for determining the liquid level of each bulk storage container such as digital computers, telepulse, or direct vision gauges. If this alternative is used a person must be present to monitor gauges and the overall filling of the tank.

(d) Liquid level sensing devices must be tested at least annually to ensure proper operation.

(e) Means shall be provided for determining the liquid level in each tank and this means shall be accessible to the delivery operator. Tank filling shall not begin until the delivery operator has determined that the tank has sufficient available capacity (ullage).

165:26-2-6. Vent piping requirements

(a) Normal vents must be sized in accordance with either:

- (1) API 2000, Venting Atmospheric and Low-Pressure Storage Tanks, or
- (2) Other accepted standards; or
- (3) Must be at least as large as the filling or withdrawal connection, whichever is larger, but in no case less than 1 1/4 in. (7 centimeters) nominal inside diameter.

(b) Where vent pipe outlets for tanks storing Class I liquids are adjacent to buildings or public ways, they must be located so that the vapors are released at a safe point outside of buildings and not less than 12 ft. (3.6 meters) above the adjacent ground level.

(c) In order to aid in dispersion, vapors must be discharged upward. Vent outlets must be located so that flammable vapors will not be trapped by eaves or other obstructions and be at least 5 ft. (1.5 meters) from building openings.

(d) Vent pipes that are provided for normal tank venting must extend at least 12 ft. (3.6 meters) above ground level or 5 ft. above the roof line at the highest point of attachment.

165:26-2-7. Collision barriers

(a) Aboveground storage tanks exposed to traffic must be resistant to damage from the impact of a motor vehicle or be protected by suitable collision barriers. The secondary

containment dike may serve as a collision barrier provided that it cannot be penetrated by a motor vehicle.

(b) When guard posts or collision barriers are installed, the following design shall be acceptable:

(1) They shall be constructed of steel not less than 4 in. (100 millimeters) in diameter and shall be filled with concrete.

(2) They shall be spaced not more than 4 ft. (1.2 meters) on center.

(3) They shall be set not less than 3 ft (0.9 meters) deep in a concrete footing of not less than 15-in. (380 millimeters) diameter.

(c) Dispensing devices, except those attached to containers, must either be mounted on a concrete island or otherwise protected against collision damage by suitable means and must be securely bolted in place. If located indoors, the dispensing device will be located in a position where it cannot be struck by a vehicle that is out of control descending a ramp or other slope. The installation must be in accordance with the manufacturer's instructions.

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.

(2) Aboveground product piping shall be subjected to a 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 filling sumps with water and monitoring the liquid level for an 8 hour period.

PART 3. SECONDARY CONTAINMENT

165:26-2-31. Double-walled tanks

Double-walled tanks do not require additional containment if all the following conditions are met:

(1) The capacity of the tank does not exceed 12,000 gallons (45,420 liters).

(2) All piping connections to the tanks are made above the normal maximum liquid level.

(3) A mechanism is provided to prevent the release of liquid from the tank by siphon flow.

(4) A mechanism is provided for determining the level of liquid in the tank, which is accessible to the delivery operator.

(5) A mechanism is provided to prevent overfilling by sounding an alarm when the liquid level in the tank reaches 90 percent of capacity and by automatically stopping the delivery of liquid to the tank when the level in the tank reaches 95 percent of capacity. In no case will these provisions restrict or interfere with the proper functioning of the normal vent or the emergency vent.

(6) Spacing between adjacent tanks is not less than 3 ft (0.9 meters).

(7) The tank is capable of resisting damage from the impact of a motor vehicle or suitable collision barriers are provided in locations where the tank is exposed to traffic.

(8) Where the interstitial space is enclosed, it is provided with emergency venting.

(9) A means is provided to establish the integrity of the interstitial space of the double wall tank.

165:26-2-32. Secondary containment

(a) Aboveground storage tanks, other than those with double walls as set out in 165:26-2-31, must have secondary containment for the fuels stored in them.

(b) Multiple products stored within the same containment area must be compatible with each other.

(c) If the secondary containment area is open to precipitation, it must be able to contain 110 percent of the capacity of the largest tank plus the volume displaced by other tanks within the containment area.

(d) The secondary containment area must be constructed with materials that are compatible with the product being stored.

- (e) The secondary containment area cannot have any uncapped drain that extends outside of the containment.
- (f) The secondary containment must be kept intact and free of vegetation, trash, water, and all other items not necessary for fuel storage.
- (g) Secondary containment can be made from native soil if the soil meets or exceeds the permeability rates listed in Appendix J, or it can be made of concrete or steel. Generally, soil containment may be preferred in open rural areas and concrete in more congested urban areas. In either case the secondary containment must be impermeable for the products stored in the tanks:
 - (1) When concrete is used for secondary containment the concrete must be suitable to contain the released product for as long as it would take to recover the release.
 - (2) Soil containment not meeting the permeability rates listed in Appendix J must be made impermeable by use of a synthetic membrane liner made of rubber, plastic, or a geosynthetic clay liner.
 - (3) A double-walled tank would meet the criteria of secondary containment.

165:26-2-32.1. Spill Prevention, Control and Countermeasure Plan

- (a) Owners of aboveground storage tanks must comply with the Spill Prevention Control and Countermeasure (SPCC) rule found in Title 40 of the Code of Federal Regulations (CFR), Part 112 (Oil Pollution Prevention). If a Spill Prevention Control and Countermeasure (SPCC) plan is required, it must be kept on site.
- (b) The registered Professional Engineer or person responsible for preparation of plan must certify that plan has been prepared in accordance with good engineering practice, including consideration of applicable industry standards and the requirements of 40 CFR 112; procedures for required inspections and testing must be established; and the plan must be adequate for the facility.

PART 4. REQUIREMENTS FOR CORROSION PROTECTION SYSTEMS

165:26-2-40. Corrosion protection

- (a) Any portion of a tank or its piping system that is in contact with the soil must be protected from corrosion by a properly engineered, installed and maintained cathodic protection system in accordance with recognized standards of design, such as:
 - (1) American Petroleum Institute Publication 1632, Cathodic Protection of Underground Petroleum Storage Tanks and Piping Systems;
 - (2) National Association of Corrosion Engineers Standard RP0193, Recommended Practice of External Cathodic Protection of On-Grade Metallic Storage Tank Bottoms;
 - (3) National Association of Corrosion Engineers Standard RP-01-69 (1996 rev.), Recommended Practice, Control of External Corrosion of Underground or Submerged Metallic Piping Systems;
 - (4) National Association of Corrosion Engineers Standard RP-02-85-95, Recommended Practice, Control of External Corrosion on Metallic Buried, Partially Buried, or Submerged Liquid Storage Systems; and
- (b) Approved or listed corrosion-resistant materials or systems include special alloys, fiberglass reinforced plastic, or fiberglass reinforced plastic coatings.

(c) Piping systems for liquids, both aboveground and underground, that are subject to external corrosion must be protected.

165:26-2-41. Compliance with corrosion protection requirements and manufacturer's specifications

Corrosion protection systems must be operated and maintained in accordance with the manufacturer's instructions and specifications to provide continuous corrosion protection to the metal components of the storage tank system that are routinely in contact with the ground. If any portion of an AST or metallic piping comes in contact with an electrolyte (dirt, sand, gravel, etc.), cathodic protection should be applied to assist in the control of corrosion. The amount of metal in contact with the electrolyte will determine the appropriate selection of cathodic protection; either galvanic anodes or an impressed current system. The selected cathodic protection system will be designed by a corrosion expert or a qualified engineer trained in the field of cathodic protection.

165:26-2-42. Frequency and criteria of inspections and tests

Cathodic protection systems must be inspected for proper operation by a qualified corrosion technician in accordance with the following requirements:

(a) Cathodic protection systems must be tested within 6 months of installation and/or repair, and at least once every 3 years thereafter by a qualified cathodic protection tester, who can demonstrate education and experience in the measurement of cathodic protection of buried or submerged metal piping systems and metal tanks.

(b) Every 60 days impressed current cathodic protection systems must be inspected by the owner or operator (or owners designated representative) to ensure that the equipment is working properly.

(c) The criteria used to determine that cathodic protection is adequate must be consistent with a code of practice developed by a nationally recognized organization, such as the National Association of Corrosion Engineers (NACE).

PART 5. PIPING

165:26-2-51. Piping protection

Piping must be located for maximum practical protection from physical damage.

165:26-2-52. Piping and gravity flow

Where tanks are at an elevation that produces a gravity head on the dispensing device, the tank outlet must be equipped with a device such as a solenoid valve, positioned adjacent to and downstream from the emergency valve, installed and adjusted so that liquid cannot flow by gravity from the tank in case of piping or hose failure when the dispenser is not in use.

165:26-2-53. Valves on piping

(a) If a submersible pump system is used, a UL listed emergency shutoff/shear valve must be installed at each dispensing device. Both the emergency shutoff/shear valve and dispensing device shall be rigidly anchored in place.

(b) If a suction pump-type dispensing device is used, a UL listed, vacuum-actuated shutoff/shear valve or equivalent-type valve must be installed directly under each dispensing device. Both the shut off/shear valve and dispensing device shall be rigidly anchored in place. Tanks installed in below-grade vaults are not required to comply with this requirement.

(c) Manual shutoff and check valves must be equipped with a pressure-relieving device that will relieve the pressure generated by thermal expansion back to the tank.

(d) Each outlet connection to an aboveground tank through which liquid can normally flow must be provided with an internal or an external emergency fire valve located as close as practical to the shell of the tank or submerged pump.

(e) An anti-siphon or solenoid valve must be installed on each supply line according to manufacturer guidance and recognized industry standards.

(f) A manual shut off or ball valve must be installed on each supply line according to manufacturer guidance and recognized industry standards.

(g) All valves must meet the construction criteria of 165:26-2-54.

165:26-2-54. Aboveground storage tank piping materials

(a) The design, fabrication, assembly, test and inspection of the piping system from the fuel tank to the fuel dispensers must be in accordance with the piping manufacturers installation recommendations and instructions.

(b) Pipes, valves, couplings, flexible connectors, fittings and other pressure containing parts must be installed in accordance with Petroleum Equipment Institute RP200, *Recommended Practices for Installation of Aboveground Storage Systems for Motor Vehicle Fueling*.

(c) Refer to Subchapter 8 for guidelines regarding over-water piping used at marinas.

(d) Valves at storage tanks and their connections to the tank must be of steel or nodular iron. Low melting point materials such as aluminum, copper, brass or non-ductile material such as cast iron may be used in aboveground piping provided that they are located downstream of an approved steel or nodular iron emergency valve that has been installed and located as close as practical to the shell of the tank or submerged pump.

(e) Valves at storage tanks may be other than steel or nodular iron if the valves are installed internal to the tank.

165:26-2-55. Underground piping materials

(a) All new underground product piping and ancillary equipment installed at a new facility or existing facility must have the following characteristics:

(1) Non-metallic;

(2) Double-walled;

(3) A tracer locator wire must be installed in all piping trenches; and

(4) Dispenser sumps must be installed and monitored with sensors as per 165:26-3-20.2.

(5) Piping transition sumps must be installed and monitored with sensors if the interstice area of connecting piping cannot be connected in an approved manner.

(b) Existing facilities that have metallic piping that fails due to corrosion or are replacing the piping system must upgrade all piping per (a) above and come into full compliance

with the rules of this Chapter and Subchapters. If the metallic line fails due to corrosion, the entire product line must be immediately removed, and cannot be repaired.

(c) Existing facilities that have metallic or single-walled nonmetallic piping and are relocating, or removing and replacing a fuel island must install dispenser sumps with sensors as per 165:26-3-20.2. Any additions to the metallic piping must be nonmetallic single or double-walled piping.

(d) Existing facilities that are replacing dispensers where the fuel islands are not being relocated, removed or replaced may add to the existing piping using the same piping material. Dispenser sumps do not have to be installed.

(e) Tracer locator wire is not required to be installed in existing piping trenches containing piping which otherwise meets the requirements in subsection (a) unless the trench is opened to repair, move, or replace the piping.

(f) Existing facilities that are replacing aboveground storage tanks may re-use single walled non-metallic piping.

(g) Existing facilities that are replacing a tank must replace underground steel piping if it has not been cathodically protected.

PART 7. VAULT REQUIREMENTS

165:26-2-71. Vaults

A vault is a superior installation system that is not required. When used they are allowed above or below grade and must meet NFPA 30 and NFPA 30A requirements.

PART 9. DISPENSER REQUIREMENTS

165:26-2-91. Dispensers

(a) Liquids must be transferred from storage tanks by means of fixed pumps designed and equipped to allow control of the flow and prevent leakage or accidental discharge.

(b) Dispensing devices for Class I liquids must be listed.

(1) Existing listed or labeled dispensing devices may be modified provided the modifications made are "Listed by Report" by an approved testing laboratory or as otherwise approved by PSTD.

(2) Modification proposals must contain a description of the component parts used in the modification and the recommended methods of installation on specific dispensing devices, and they must be made available to PSTD upon request.

(c) A control must be provided that will permit the pump to operate only when a dispensing nozzle is removed from its bracket or normal position with respect to the dispensing device and only when the switch on this dispensing device is manually actuated. This control must also stop the pump when all nozzles have been returned either to their brackets or to the normal non-dispensing position.

(d) A listed emergency breakaway device designed to retain liquid on both sides of the breakaway point must be installed on each hose dispensing any class of liquids. These devices must be installed and maintained in accordance with the manufacturer's instructions. Where hoses are attached to a hose-retrieving mechanism, the listed emergency breakaway device must be installed between the point of attachment of the hose-retrieving mechanism to the hose and the hose nozzle valve.

165:26-2-92. Dispenser hose

- (a) Listed hose assemblies must be used to dispense fuel.
 - (1) Hose length at facilities will not exceed 18 ft (5.5 m).
 - (2) Hose at retail and marina facilities must be checked daily for evidence of blistering, carcass saturation or separation, cuts, nicks or abrasions that expose reinforcement material and for slippage, misalignment or leaks at couplings.
 - (3) Two lengths of hose must not be coupled together.
- (b) Defective hoses must be immediately removed from service.
- (c) At least once each month the hose must be completely extended and inspected.
 - (1) The hose couplings and the first twelve inches of hose adjacent to the couplings must be examined.
 - (2) Structural weakness must be checked by pressing the hose in the area around its entire circumference for soft spots.
 - (3) Hoses that show evidence of soft spots must be immediately removed.

165:26-2-93. Nozzles

At any installation where the normal flow of product may be stopped other than by the hose nozzle valve such as at pre-pay stations, the system must include listed equipment with a feature that causes or requires the closing of the hose nozzle valve before product flow can be resumed or before the hose nozzle valve can be replaced in its normal position in the dispenser; or the hose nozzle valve must not be equipped with a latch-open device.

PART 11. TANK FILLING PROCEDURES

165:26-2-111. Tank filling operation

- A delivery vehicle must be separated from any aboveground tank by at least 25 ft. (7.6 m) if possible.
- (1) No minimum separation distance is required for tanks that are filled by gravity.
 - (2) The required minimum separation distance will be reduced to 15 ft. (4.6 m) where the fuel being delivered is not a Class I liquid.

PART 13. MISCELLANEOUS SAFETY PROVISIONS

165:26-2-131. Fencing

- (a) Tanks not enclosed in vaults must be enclosed with a chain link fence at least 6 ft. (2 m) high. The fence must be separated from the tanks by at least 10 ft (3 m) and must have a gate that is secured against unauthorized entry.
- (b) The area within the fence must be kept free of vegetation, debris and any other material that is not necessary to the proper operation of the tank and piping system.
- (c) Tanks are not required to be enclosed within a fence if the property on which the tanks are located already has a perimeter security fence.
- (d) A fence may not be required if another method effectively restricts access to the tanks.

165:26-2-132. Required signs

(a) Warning signs must be conspicuously posted in the dispensing area incorporating the following or equivalent wording:

- (1) WARNING
- (2) It is unlawful and dangerous to dispense gasoline into unapproved containers.
- (3) No smoking.
- (4) Stop motor.
- (5) No filling of portable containers in or on a motor vehicle.
- (6) Place container on ground before filling.

(b) An OCC approved label must be displayed in a clear, conspicuous and prominent manner visible to customers using either side of the pump from which a blended ethanol or biodiesel product is dispensed.

165:26-2-133. Sources of ignition

(a) Smoking materials, including but not limited to matches and lighters, must not be used within 20 ft. (6 m) of areas used for fueling, servicing fuel systems for internal combustion engines, or receiving or dispensing of Class I liquids.

(b) Conspicuous and legible signs prohibiting smoking must be posted within sight of the customer being served.

(c) The motors of all equipment being fueled must be shut off during the fueling operation, except for emergency generators, pumps, etc., where continuing operation is essential.

PART 15. ELECTRICAL

165:26-2-151. Electrical requirements

(a) All electrical work must be performed by a licensed electrician.

(b) All electrical wiring and electrical utilization equipment must be of a type specified by and must be installed in accordance with NFPA 30A and NFPA 70, National Electrical Code.

(c) Clearly identified and easily accessible switch(es) or circuit breaker(s) must be provided at a location remote from dispensing devices, including remote pumping systems, to shut off the power to all dispensing devices in the event of an emergency.

(d) Electrical equipment that was installed in compliance with an earlier state or national code will not require modification unless the equipment is hazardous to people or property.

PART 19. REPAIRS TO ABOVEGROUND STORAGE TANK SYSTEMS

165:26-2-191. Repairs to aboveground tank systems

Repairs to an aboveground storage tank must be performed by an AST Licensee. Routine maintenance such as painting and repairs to a product dispensing unit will not be considered repairs to the storage tank system.

PART 21. REMOVAL AND CLOSURE OF ABOVEGROUND STORAGE TANK SYSTEMS

165:26-2-210. Tank removal and closure

- (a) Owners and Operators of all aboveground storage tank systems must notify the Petroleum Storage Tank Division at least 14 days prior to the removal or permanent closure of aboveground storage tanks and/or lines by submitting the PSTD scheduling form. If events require a change in the date of removal, the Division shall be given 48 hours notice of 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 PSTD grants a variance.
- (d) An AST Licensee must remove aboveground storage tank systems.

165:26-2-211. Compliance with removal and closure requirements

Owners and/or operators of aboveground storage tank systems that are temporarily taken out of service or permanently removed, must comply with all the requirements of this Part.

165:26-2-212. Temporary removal from service

When an aboveground storage tank system is taken temporarily out of service, the owner or operator must:

- (1) Remove all fluid from the tank.
- (2) Leave all vent lines open and functioning.
- (3) Notify PSTD of a change in service on the prescribed form.

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

- (a) A tightness test must be completed on the underground portion of out of service systems if more than 12 months have elapsed since the last tightness test.
- (b) Systems out of service for more than 12 months are required to meet all the requirements of this Chapter.

165:26-2-213. Permanent closure

Owners and/or operators of aboveground storage tank systems who do not intend to use the tanks for fuel storage in the future must close the tank systems after they have been out of service for more than 12 months by performing the following:

- (1) Empty, clean, purge and devaporize the tank of all flammable products.
- (2) Separate the piping from the tank.
- (3) Perform a site assessment pursuant to 165:26-2-214, "Assessing the site at tank closure or change in service."
- (4) An AST licensee must be on site at all times during the removal of an aboveground storage tank and/or lines.

165:26-2-214. Assessing the site at tank closure or change in service

- (a) Before permanent closure or a change in service is completed, the owner or operator must measure for the presence of a release where contamination is most likely to be present at the aboveground storage tank system site. Please refer to the PSTD AST sampling guidance document when choosing sample locations.

- (b) For tank systems containing petroleum product, analyses must be done for both TPH and BTEX.
- (c) If contaminated soils, contaminated groundwater, or free product as a liquid or vapor is discovered, the owner must immediately begin corrective action in accordance with OAC 165:29, the Commission's Rules on Remediation.
- (d) Any sampling at closures must be under the supervision of a licensed Remediation Consultant.
- (e) The requirements of this Section do not apply to aboveground storage tanks which are located in or on buildings.

SUBCHAPTER 3. RELEASE PREVENTION AND DETECTION

Part 4. RELEASE DETECTION

165:26-3-19. General monitoring requirements

Tanks must be monitored at least every 30 days for releases using one of the methods or combinations of methods listed in this Chapter.

165:26-3-20. General release detection methods and devices

- (a) Owners and operators of new and existing aboveground storage tank systems must use a release detection method, or a combination of release detection methods, that is:
 - (1) Capable of detecting a release of regulated substances from any portion of the aboveground storage tank system that routinely contains product.
 - (2) Designed, installed, calibrated, operated, and maintained in accordance with the manufacturer's instructions, including routine maintenance and service checks for operability or running conditions.
 - (3) Capable of meeting the performance requirements of this Chapter, with any performance claims and their manner of determination described in writing by the equipment manufacturer or installer.
 - (4) Sampled, tested, or checked for a release at least once every 30 days.
- (b) Owners and/or operators must keep all written manufacturer and installer performance specifications and the manner in which those specifications are determined.
- (c) All electronic and mechanical equipment used for release detection, monitoring or warning must be tested for proper operation and calibration annually or per the manufacturer's recommendation, whichever is more frequent.

165:26-3-20.1. Monitoring requirements for aboveground tanks and aboveground piping

One of the following methods must be used:

- (1) Visual Monitoring
 - (A) Visual inspection of the aboveground storage tank systems to identify cracks or other defects in the secondary containment area and product transfer area.
 - (B) Visual inspection of the exterior surface of the tanks, piping, valves, pumps and other equipment for cracks, corrosion, releases and maintenance

deficiencies; and identify poor maintenance, operating practices or malfunctioning equipment.

(C) Visual inspection of elevated tanks or tanks on concrete slabs.

(D) Visual inspection of the area between the tank's outer shell or the tank's floor and containment area or a vapor monitoring of the soil directly under the tank bottom or perimeter and the water table, unless the tank containment has a sound concrete floor.

(E) Visual inspections are not adequate where due to the nature of the aboveground storage tank and/or its secondary containment it cannot be determined whether a leak has occurred. A good example would be a vertical tank that is not raised off the ground, making it impossible to visually inspect its bottom, and is not sitting on a sound concrete slab within sound secondary containment.

(F) An annual line tightness test performed by a certified tester may be used in lieu of monthly visual monitoring for aboveground product piping.

(2) Monthly Inventory Reconciliation

(A) Product inventory control (or another test of equivalent performance) must be conducted monthly to detect a release of at least 1.0 percent of flow-through plus 130 gallons on a monthly basis in the following manner:

(i) Inventory volume measurements for regulated substance inputs, withdrawals, and the amount remaining in the tank are recorded each operating day.

(ii) The equipment used is capable of measuring the level of product over the full range of the tank's height to the nearest one-eighth inch (1/8").

(iii) The regulated substance inputs are reconciled with delivery receipts by measurement of the tank inventory volume before and after delivery.

(iv) Product dispensing is metered and recorded within an accuracy of 6 cubic inches for every 5 gallons of product withdrawn.

(v) The measurement of any water level in the bottom of the tank is made to the nearest one-eighth inch (1/8") at least once a month.

(vi) Use of the PSTD Monthly Inventory Reconciliation Form or an electronic equivalent is required.

(3) Interstitial Monitoring. Interstitial monitoring can be used for double walled aboveground storage tank systems. The sampling or testing method must detect a release monthly in accordance with the manufacturer instructions through the inner wall in any portion of the tank that routinely contains product.

(4) Automatic tank gauging systems

(A) Automatic tank gauging systems (ATGs) that test for the loss of product must conduct an automatic product level monitor test at a minimum frequency of once every 30 days and be capable of detecting at least a 0.2 gallon per hour leak rate with a probability of detection of 0.95 and a probability of false alarm of 0.05.

(B) Automatic tank gauging systems (ATG's) must be third party certified for the size and quantity of the tank. Only third party certifications that have been reviewed and approved by the National Work Group on Leak Detection Evaluations (NWGLDE), as evidenced by their posting on the NWGLDE Web Site, will be accepted (nwgldc.org).

165:26-3-20.2. Installation and monitoring requirements for underground piping

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

(1) Pressurized piping

(A) Piping that conveys regulated substances under pressure must be equipped with an automatic line leak detector installed and operated in accordance with this Chapter.

(B) New installations and facilities replacing a piping system must have at least one sump sensor, float or similar mechanical device for each tank system, located at the bottom of the lowest piping gradient sump. 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. Sensors must be mounted at the bottom of the sump(s) and accessible for testing.

(C) Underground pressure piping from a master dispenser to a satellite dispenser 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.

New installations and facilities replacing a piping system must have at least one sump sensor, float or similar mechanical device for each tank system, located at the bottom of the lowest piping gradient sump. 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. Sensors must be mounted at the bottom of the sump(s) and accessible for testing.

(3) Methods of release detection for pressurized piping.

Each method of release detection for underground pressurized piping must be performed in accordance with the following requirements:

(A) Automatic mechanical line leak detectors and annual line tightness testing

(i) Methods which alert the owner and/or operator to the presence of a leak by restricting or shutting off the flow of regulated substances through piping or by triggering an audible or visual alarm may be used only if they detect leaks of 3 gallons per hour at 10 psi line pressure within 1 hour.

(ii) An annual test of the operation of the leak detector must be conducted by simulating a leak in accordance with the manufacturer's requirements.

(iii) Automatic line leak detectors installed on or after September 22, 1991 must be capable of detecting the leak rate with a probability of detection of 0.95 and a probability of false alarm of 0.05.

(iv) A hydrostatic line tightness test must be performed annually by a certified tester.

(B) Sump sensors with automatic line leak detectors

(i) Double walled piping with sump sensors, floats or similar mechanical devices at each dispenser, transition and tank 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 according to manufacturer's requirements. Sensors status and alarm history reports must be printed and retained each month.

(iii) An annual function test of the operation of the leak detector must be conducted by simulating a leak in accordance with the manufacturer's requirements.

(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 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 gallons per hour at least once every month; and

(iii) The system is capable of detecting and tests for a leak of 0.1 gallons per hour annually; and

(iv) The system must be function tested annually by simulating a leak in accordance with manufacturer's specifications. If the system has printer capabilities, attach the electronic line leak detector printout documenting the system shutdown or alarmed when tested.

(4) Methods of release detection for suction piping.

Each method of release detection for underground suction piping must be performed in accordance with the following requirements.

(A) Sump Sensors

(i) Double walled piping with sump sensors, floats or similar mechanical devices at each dispenser, transition and tank 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 according to manufacturer's requirements. Sensors status and alarm history reports must be printed and retained each month.

(B) Annual Line Tightness Testing

A hydrostatic line tightness test must be performed annually by a certified tester.

165:26-3-20-.3. Commission-approved alternative methods [REVOKED]

PART 14. RELEASE REPORTING REQUIREMENTS

165:26-3-77. Release reporting

(a) The reporting requirements of this Part do not relieve the owner or operator of the responsibility to take necessary corrective action pursuant to OAC 165:29, the Commission's Rules on Remediation, to protect the public health, safety and the environment, including the containment and cleanup of spills and overfills that are not required to be reported by this Chapter.

(b) All aboveground storage tank system owners, operators, their employees or agents, or transporters must report any of the following events to PSTD by telephone at (405) 521-6575 or toll free at 1-888-621-5878 (if after hours or on weekends or holidays, a detailed message must be left on the PSTD answering machine) within 24 hours of

knowing of any of the following situations. Owners or operators must provide written confirmation to follow within 20 days in accordance with the requirements established in this Chapter. Qualifying events include:

(1) The discovery of released regulated substances at the aboveground storage tank system facility or in the surrounding area (such as the presence of free product or vapors in soils, basements, crawlspaces, sewer and utility lines, and nearby surface water);

(2) Any unusual operating conditions observed by owners and/or operators, such as the unexplained erratic behavior of product dispensing equipment, the sudden loss of product from the aboveground storage tank system, or an unexplained presence of water in the tank, unless system equipment is found to be defective but not leaking, and is immediately repaired or replaced.

(3) In the case of inventory control, two consecutive months where the Total Gallons Over/Short is greater than the "Leak Check" (1 percent of product sales plus 130 gallons) must be reported to PSTD within 24 hours of the owner or operator knowing the inventory control results.

(4) Monitoring results from a release detection method required by this Chapter that indicate a release may have occurred unless the monitoring device is found to be defective, and is immediately repaired, recalibrated, or replaced, and additional monitoring does not confirm the initial result.

(c) While aboveground releases of petroleum of less than 25 gallons need not be reported, they must be recorded by the owner or operator and contained and cleaned up immediately. All of the following releases must be reported by telephone within 24 hours of discovery, with a written confirmation to follow within 20 days in accordance with the requirements established in this Chapter:

(1) All known belowground releases in any quantity; for example, a release resulting from a line broken during an excavation.

(2) Any aboveground release of petroleum greater than 25 gallons.

(3) Any aboveground release of petroleum that is less than 25 gallons, but cannot be contained and cleaned up within 24 hours.

(d) All owners and/or operators of aboveground storage tank systems must maintain records of all reportable and non-reportable events listed in this section sufficient to permit adequate inspection and review by PSTD. These records must be kept for 3 years following the date of the event.

(e) If any of the possible, probable or definite release conditions in subsections (a) through (c) above are not reported within 24 hours, the owner or operator must be prepared to provide documentation or evidence that would reasonably indicate why knowledge of release conditions or monitoring results was delayed.

PART 17. RELEASE INVESTIGATION

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

(a) This Section applies to the investigation of all reportable releases unless the 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 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 Remediation 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 OAC 165:29, the Commission's Rules on Remediation.

(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) Levels of chemical constituent concentrations that shall confirm a release at the direction of PSTD 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 be required to confirm a case at the direction of PSTD.
- (d) Within 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) 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 a remediation may be undertaken under the provisions of Chapter 29.

SUBCHAPTER 4. INSPECTIONS, PENALTIES, AND FIELD CITATIONS

PART 1. INSPECTIONS

165:26-4-1. Owner/operator cooperation

- (a) Owners and operators of regulated aboveground storage tank systems must cooperate with inspections, monitoring, and testing requested by or conducted by PSTD.
- (b) Upon request of PSTD, owners and operators must, at all reasonable times:
 - (1) Furnish information relating to the owners' or operators' storage tank facilities, the contents of those facilities, and the associated equipment connected to those facilities.
 - (2) Conduct monitoring or testing of storage tank facilities.
 - (3) Permit PSTD to have access to, and to review, inspect, and copy records relating to storage tank facilities.

165:26-4-2. Authority of the Commission

The Commission has the responsibility and authority at any reasonable time to:

- (1) Enter any storage tank facility or other place where a storage tank system is located within the State.
- (2) Inspect and obtain samples from any facility of any regulated substances stored in the storage tank system.
- (3) Conduct monitoring or testing of the tanks, piping, associated equipment, contents, or the environment at regulated facilities and any location impacted or potentially impacted by a release at a regulated facility.

165:26-4-3. Completion of inspections

All inspections, whether done by PSTD or ordered by the PSTD to be conducted by the owner or operator, must be started and completed with reasonable promptness, and the results submitted to PSTD consistent with the provisions of this Chapter.

165:26-4-5. 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:
 - (1) Records of installation.
 - (2) Records of repair and retrofit operations.
 - (3) Review of release containment practices.
 - (4) Review of release detection practices.
 - (5) Compliance with prior Commission orders to perform corrective action.
 - (6) Records of removal and closure.
- (c) In addition, PSTD may perform any other inspection, testing, or monitoring which is necessary to ensure compliance with this Chapter and to protect property, human health and safety and the environment.

165:26-4-6. Exception and Variances [REVOKED]

PART 5. NOTICES OF VIOLATION, WARNING CITATIONS AND FINE CITATIONS

165:26-4-15. Notices of Violation, Warning Citations and Fine Citations

The purpose of this Section is to create a procedure that allows PSTD Fuel Specialists to issue Notices of Violation (NOVs) for any violation(s) found during Fuel Specialists' onsite inspections of storage tank systems and facilities. The issuance of an NOV will allow petroleum storage tank owners and operators to quickly address and correct the storage tank violation(s) without having to go to court at the Commission.

165:26-4-16. Notices of Violation

- (a) When a PSTD Fuel Specialist finds a violation of any rule or order of the Commission regarding the regulation of petroleum storage tanks, the Fuel Specialist may issue a Notice of Violation (NOV) pursuant to Appendix G.
 - (1) A Notice of Violation is to alert the tank owner or operator that a violation has been found. The NOV will describe the violation, and warn that further PSTD enforcement action may occur if the violation is not corrected.
 - (2) There are some violations where a Citation will be issued to the tank owner or operator.
 - (3) In all situations where an NOV is issued, it must explain to the person to whom it is given what the offense is and how the person can correct it.
- (b) Notices of Violation will state the following information:
 - (1) A clear description of the violation(s).
 - (2) A date by which the violation(s) must be corrected.
 - (3) The name of the Fuel Specialist issuing the NOV, along with a telephone number and address so that the tank owner or operator can ask the Fuel Specialist questions.
- (c) A Fuel Specialist will give the NOV(s) to the owner of the storage tank facility, if the owner is at the facility. If the owner is not present, operators or managers at the storage tank facility can be given NOVs.

165:26-4-17. Re-inspection and Citation

- (a) On or after the date that the violation is to be corrected, a Fuel Specialist will re-inspect the storage tank facility to verify that the violation has been corrected.
- (b) If the re-inspection shows that the violation has not been corrected, the Fuel Specialist will:
 - (1) Refer the violation to the PSTD Inspection and Compliance Manager for formal enforcement action; and/or
 - (2) If the storage tank facility constitutes an immediate hazard it may be shut down pending a correction of the problem or a hearing on the issue.

165:26-4-18. Payment of fine or hearing

- (a) The storage tank owner or operator can either pay the amount of the fine as stated in the citation or request an evidentiary hearing.
- (b) The tank owner or operator will have thirty (30) days from the date the citation was issued to pay the fine.
 - (1) A fine may be paid with cash, a money order, or check. Any cash payment must be made at the Commission cashier. All checks must be made payable to the Oklahoma Corporation Commission – Petroleum Storage Tank Division. If sending payment through the mail, a copy of the citation must be sent with the payment to ensure proper credit.
 - (2) Payment of the citation within the 30 day time frame will not be considered an agreement or disagreement with the citation.
- (c) If the storage tank owner or operator disagrees with the citation, he or she can have a hearing at the Commission.
 - (1) To request a hearing, the procedure as provided on the citation should be followed and must be made within seven (7) days from the date the citation was issued.
 - (2) PSTD will set a date for a hearing and will notify the tank owner or operator of the date and time of the hearing.
 - (3) If found guilty at the hearing, the tank owner or operator must pay the amount of the citation, as well as an administrative cost of \$250.00.
- (d) If a citation has not been paid within ninety (90) days of being issued or within ninety (90) days of a Commission order confirming the fine, the amount of the fine will double. Refusal to comply with an order of the Commission may result in formal enforcement after notice and hearing in an amount as allowed by law.
- (e) Failure of a tank owner or operator to appear at the hearing will result in additional enforcement actions. These actions may include the addition of a larger fine and/or assessment of an administrative fee.
- (f) An appeal from the hearing may be made to the Commission en banc in accordance with OAC 165:5.
- (g) A tank owner or operator is still responsible for following the Commission's rules regarding petroleum storage tanks regardless of paying a fine or correcting a violation.

PART 7. PENALTIES

165:26-4-21. Penalties

(a) Pursuant to 17 O.S. § 306, any owner or operator of a regulated aboveground storage tank system located within the State who violates any of the provisions of this Chapter may be issued a citation or may be subject to an administrative penalty not to exceed \$10,000.00 for each day that the violation continues.

SUBCHAPTER 6. REQUIREMENTS FOR ABOVEGROUND STORAGE TANK SYSTEMS UTILIZED BY AIRPORTS OPEN TO THE PUBLIC

PART 1. GENERAL APPLICATION AND COMPLIANCE PROVISIONS

165:26-6-1. Application

(a) This Subchapter applies to aboveground storage tank systems for aircraft fuel at airports. A storage tank system consists of a stationary tank and the pipes, pumps and dispensers attached to it. This Chapter does not extend to aircraft fuel servicing vehicles.

(b) Private airstrips are excluded from this Subchapter.

(c) Subchapters 1 General Provisions, 2 General Requirements for AST's, 3 Release Prevention and Detection, and 4 Inspections, Penalties, and Field Citations shall also apply in addition to this Subchapter.

165:26-6-2. Timeframes for registration and compliance with rules

(a) Stationary tanks greater than 110 gallons must be registered with PSTD.

(b) Airport tank systems must come into full compliance with the rules of this Chapter and subchapters before July 1, 2009.

165:26-6-3. Codes and standards

PSTD adopts NFPA 407, which serves as a basis for the standards in this Subchapter. A copy of NFPA 407 is available for inspection at PSTD during regular business hours.

PART 3. TANK DESIGN, CONSTRUCTION, CAPACITY AND LOCATION REQUIREMENTS

165:26-6-10. Maximum capacity for tanks

There is no maximum capacity for storage tanks at airports. Local jurisdictions may have more stringent regulations.

165:26-6-14. Tank distance requirements

(a) Existing aboveground storage tanks must be at least 100 feet from the edge of the runway;

(b) Relocated or new tanks must be at least 200 feet from the edge of the runway.

PART 9. PIPING REQUIREMENTS

165:26-6-40. Aboveground piping at airports

- (a) Aboveground product piping must be metal and rated for the system working pressure or at least 125 psi (860 kPa), whichever is greater.
- (b) Flanged connections or approved couplings must be provided to avoid the need for cutting and welding where components are serviced or replaced. Gaskets in flanged connections must be of a material and design that resist fire exposure for a time comparable to the flange and bolts.
- (c) Piping must be adequately supported.

PART 15. DISPENSER REQUIREMENTS

165:26-6-61. Dispenser hose

- (a) Aircraft fueling hose that is frequently used must be inspected before use each day.
 - (1) The hose must be checked for evidence of blistering, carcass saturation or separation, cuts, nicks or abrasions that expose reinforcement material, and for slippage, misalignment or leaks at couplings.
 - (2) If coupling slippage or leaks are found, the cause of the problem must be determined.
- (b) Defective hoses must be immediately removed from service.
- (c) At least once each month the hose must be thoroughly inspected including:
 - (1) The hose couplings and the hose must be examined for a length approximately 12 in. (305 mm) adjacent to the couplings.
 - (2) Structural weakness must be checked by pressing the hose in the area around its entire circumference for soft spots.
 - (3) Hoses that show evidence of soft spots must be immediately removed from service.
 - (4) The nozzle screens must be examined for rubber particles. The presence of rubber particles indicates possible deterioration of the interior, and the hose must be immediately removed from service.
 - (5) A hose assembly that has been subjected to abuse, such as severe end-pull, flattening or crushing by a vehicle, or sharp bending or kinking, must be immediately removed from service.
 - (6) If inspection shows that a portion of a hose has been damaged, the hose must be immediately replaced. Two lengths of hose must not be coupled together.
 - (7) Before any hose assembly is placed in service, it must be visually inspected for evidence of damage or deterioration.
 - (8) Kinks or short loops in fueling hose must be avoided.

165:26-6-63. Dispenser location at airports

- (a) Fueling hydrants, cabinets and pits must be located at least 50 ft (15.2 m) from any terminal building, hangar, service building, or enclosed passenger concourse (other than loading bridges).
- (b) Pumps must be located at or below ground level.
- (c) Relay pumping is not allowed.
- (d) Pumps installed outside of buildings must be located at least 5 ft. (1.5 m) from any building opening. They must be substantially anchored and protected against physical

damage from collision.

165:26-6-64. Specific requirements for airport dispensers

(a) The valve that controls the flow of fuel to an aircraft must have a deadman control. The deadman control device must be arranged to accommodate the operational requirements. The fuel flow control valve must be one of the following:

- (1) The hydrant pit valve.
- (2) On the hose nozzle for overwing servicing.

(b) Deadman controls must be designed to preclude defeating their intended purpose.

(c) The deadman flow control in the nozzle may be used for overwing fueling.

(1) Notches or latches in the nozzle handle that could allow the valve to be locked open are prohibited.

(2) Each overwing servicing nozzle must have a cable with a plug or clip for bonding to the aircraft.

(3) Nozzles for underwing fueling must be designed to be attached securely to the aircraft adapter before the nozzle can be opened. It must not be possible to disengage the nozzle from the aircraft adapter until the nozzle is fully closed.

(d) Fuel servicing pump mechanisms must be designed and arranged so that failure or seizure does not cause rupture of the pump housing, a tank, or of any component containing fuel. Fuel pressure must be controlled within the stress limits of the hose and plumbing by means of either an in-line pressure controller, a system pressure relief valve, or other suitable means. The working pressure of any system component must equal or exceed any pressure to which it could be subjected.

(e) Listed or approved dispensing devices must be used.

(f) Access to dispensing equipment must be controlled by means of mechanical or electronic devices designed to resist tampering and to prevent access or use by unauthorized persons.

(g) Dispensing devices must have a listed or approved emergency shutoff valve, incorporating a fusible link or other thermally actuated device designed to close automatically in case of fire.

(1) This valve must also incorporate a shear section that automatically shuts off the flow of fuel due to severe impact.

(2) This valve must be rigidly mounted at the base of the dispenser in accordance with the manufacturer's instructions.

(3) Dispensing devices or cabinets must be designed so that a proper bond between the aircraft and the fueling equipment can be established.

PART 17. TANK FILLING PROCEDURES

165:26-6-73. Emergency controls

(a) Each fuel system must have means for quickly and completely shutting off the flow of fuel in an emergency. This requirement is in addition to the requirement for a deadman control of fuel flow.

(b) The emergency fuel shutoff system must include shutoff stations located outside of probable spill areas and near the route that normally is used to leave the spill area or to reach the fire extinguishers provided for the protection of the area.

PART 19. DISPENSING PROCEDURES

165:26-6-80. Dispensing fuel into aircraft

Aircraft being fueled from a stationary dispenser must be positioned so that aircraft fuel system vents or fuel tank openings are not closer than 25 ft. (8 m) from any terminal building, hangar, service building or enclosed passenger concourse other than a loading walkway. Aircraft being fueled must not be positioned so that the vent or tank openings are within 50 ft. (15 m) of any combustion and ventilation air-intake to any boiler, heater or incinerator room.

165:26-6-81. Static protection and bonding

(a) Dispensing devices or cabinets must be designed so that a proper bond between the aircraft and the fueling equipment can be established.

(b) Conductive hose must be used to prevent electrostatic discharge but not to accomplish required bonding.

PART 21. MISCELLANEOUS SAFETY PROVISIONS

165:26-6-86. Required signs

Entrances to fueling areas must be posted with signs that state:

- (1) No Smoking.
- (2) Shut engines off.

165:26-6-88. Fire extinguishers

(a) Extinguishers specified for protection of fuel servicing operations should be located along the fence, near dispensers or at emergency remote control stations of airport fixed-fuel systems.

(b) Extinguishers should be located near but not in probable spill areas.

SUBCHAPTER 8. REQUIREMENTS FOR ABOVEGROUND STORAGE TANK SYSTEMS UTILIZED BY MARINAS

PART 1. GENERAL APPLICATION AND COMPLIANCE PROVISIONS

165:26-8-1. Application

(a) This Subchapter applies to the storage, handling and use of regulated substances kept in aboveground storage tanks at marinas.

(b) Subchapters 1 General Provisions, 2 General Requirements for AST's, 3 Release Prevention and Detection, and 4 Inspections, Penalties, and Field Citations shall also apply in addition to this Subchapter.

165:26-8-2. Timeframes for registration and compliance with rules

(a) Tanks that are greater than 110 gallons must be registered with PSTD. The tank and piping system must come in compliance with the rules of this Chapter and

Subchapter before July 1, 2009. Compliance may be required sooner for any part of a system which poses a threat to property, people, or to the environment.

(b) All new underground piping at existing facilities must be installed in accordance with 165:26-2-55, "Underground piping materials," and with 165:26-3-9, "Installation and monitoring requirements for underground piping."

(c) All dock or pier product piping from the shoreline to the dispensers at new facilities must be installed according to 165:26-8-40.1 "Over-water piping at marinas" and 165:26-8-40.2 "Installation requirements for over-water piping".

(d) All dock or pier product piping from the shoreline to the dispensers at existing facilities must be upgraded before the deadline date of July 1, 2009 according to 165:26-8-40.1 "Over-water piping at marinas" and 165:26-8-40.2 "Installation requirements for over-water piping".

(e) Temporary tanks may not be used at marinas.

Agency Note: PEI is currently developing a standard specific to marina installations. It is our intent to incorporate these standards once completed. The OCC will not enforce an upgrade deadline for the over-water piping until the PEI standard has been issued and approved.

165:26-8-2.1. Release Detection Requirements for Marinas

Monitoring requirements, at a minimum, must consist of an annual line tightness test conducted no later than April 1st of each year.

PART 3. TANK DESIGN, CONSTRUCTION, CAPACITY AND LOCATION REQUIREMENTS

165:26-8-10. Maximum capacity for tanks

Aboveground storage tanks storing gasoline and diesel fuel at an individual site must be limited to a maximum capacity of 12,000 gal. (45,600 L) and an aggregate capacity of 40,000 gal. (152,000 L). Local jurisdictions may have more stringent regulations.

165:26-8-13. Location of aboveground storage tanks at marinas

(a) Tanks supplying marinas and pumps not integral with the dispensing device must be onshore.

(b) All new aboveground storage tanks located at marinas must be located above the flood stage level.

PART 9. OVER-WATER PIPING REQUIREMENTS

165:26-8-40.1. Over-water Piping at marinas

(a) The design, fabrication, assembly, test, and inspection of the piping system from the fuel tank to the fuel dispensers must be in accordance with NFPA 30 and NFPA 30A.

(b) The piping must be installed according to the manufacturers installation recommendations and instructions.

(c) Piping must be listed and approved by the manufacturer for aboveground

installations.

165:26-8-40.2. Installation Requirements for Over-Water Piping

(a) Steel Piping

(1) Piping shall be installed with proper support and strain relief in order to eliminate the physical stress on the piping and piping connections caused by the constant movement of the water and floating dock. Fuel piping and electrical conduit shall be rigidly attached to the dock before the piping enters the sump area, in order to prevent strain on the entry boots and primary pipe fittings.

(2) Steel flex connectors must be used between the shore piping and the piping on the floating structure and between separate sections of the floating structure to allow for movement of the dock and changes in water levels.

(3) Onshore piping must be rigidly anchored in place to prevent movement when water levels are elevated.

(4) A listed emergency breakaway device designed to retain liquid on both sides of the breakaway point must be installed on each line serving the dock. The breakaway device shall be located where the dock piping will separate from the shore or secured ramp piping. The piping shall be secured at both ends of the breakaway device so that the piping will withstand the forces and pressures exerted upon it.

(5) There must be a normally closed explosion proof solenoid valve with a pressure relief valve installed in each product line at the shoreline.

(6) A ball valve must be installed at the shoreline in order to manually shut off the flow of fuel.

(7) Containment sumps must be installed under all dispensers and monitored with sensors. If a pressure system is used all sump sensors must automatically control the electricity to both the solenoid valves and submerged pump. If a suction system is used the sump sensors should automatically control the electricity to both the solenoid valve and suction pump motor.

(8) If the onshore piping is double walled a transition sump is required at the shoreline in order to contain a release from the onshore piping. The transition sump must contain the ball valve and solenoid valve and be rigidly anchored in place.

(b) Double Walled Piping

(1) Double walled piping must be installed according to the double wall piping manufacturer recommendations.

(2) All double walled piping installed above the water shall be enclosed inside a rigid metal chase or conduit except at joints requiring flexibility. A flexible metal conduit can be used between shore piping and piping on the floating structure or between separate sections of the floating structure to allow for movement of the dock and changes in water levels. Both the rigid and flexible metal chase/conduit must shield the fuel pipe from damage by fire and in itself be fire resistant.

(3) Due to the constant movement of the water and the floating dock, piping shall be installed with proper support and strain relief in order to eliminate the physical stress on the piping and piping connections. Fuel piping and electrical conduit shall be rigidly attached to the dock before the piping enters the sump area, in

order to prevent strain on the entry boots and primary pipe fittings.

(4) Onshore piping must be rigidly anchored in place to prevent movement when water levels are elevated.

(5) A listed emergency breakaway device designed to retain liquid on both sides of the breakaway point must be installed on each line serving the dock. The breakaway device shall be located where the dock piping will separate from the shore or secured ramp piping. The piping shall be secured at both ends of the breakaway device so that the piping will withstand the forces and pressures exerted upon it.

(6) There must be a normally closed explosion proof solenoid valve with a pressure relief valve installed in each product line at the shoreline.

(7) A ball valve must be installed at the shoreline in order to manually shut off the flow of fuel. It must be installed so that it is accessible to the operator at all water levels.

(8) Containment sumps must be installed under all dispensers and monitored with sensors. If a pressure system is used all sump sensors must automatically control the electricity to both the solenoid valves and submerged pump. If a suction system is used the sump sensors should automatically control the electricity to both the solenoid valve and suction pump motor.

(9) A transition sump must be rigidly anchored in place either on the dock or at the shoreline. The transition sump must contain the ball valve, solenoid valve, and emergency breakaway device. The transition sump must be either monitored with a sensor or a bypass tube must be used in order to divert a leak from the transition sump to the dispenser sump where it would be detected by a sensor.

PART 15. DISPENSER REQUIREMENTS

165:26-8-61. Dispenser hose

Listed hose assemblies must be used to dispense fuel. Where hose length exceeds 18 ft (5.5m), the hose shall be secured so as to protect it from damage, such as a hose reel, and in no case shall the hose exceed 50 ft (15m) in length.

165:26-8-62. Nozzles

Dispensing nozzles used at marinas must be the automatic closing type.

165:26-8-63. Dispenser location at marinas

Dispensing devices at marinas may be located on open piers, wharves, floating docks, shores or on piers of the solid-fill type, but must be located apart from other structures to provide room for safe ingress and egress of watercraft for fueling. Dispensing devices must be in all cases at least 20 ft. (6 m) from any activity involving fixed sources of ignition.

165:26-8-64. Specific requirements for dispensers at marinas; maintenance

When maintenance of a Class I dispenser is necessary the following precautions must be taken before maintenance begins:

- (1) Only persons knowledgeable in performing the required maintenance can perform the work.
- (2) All electrical power to the dispenser, the dispensing pump, and all associated circuits must be shut off at the main electrical panel.
- (3) The emergency shutoff valve at the dispenser, if installed, must be closed.
- (4) All unauthorized persons are prohibited from coming within 20 ft (6 m) of the dispenser while the maintenance work is being done.

PART 19. DISPENSING PROCEDURES

165:26-8-80. Attendants at marinas

- (a) Marinas may have an attendant or supervisor on duty when the marina is open for business. The attendant's primary function will be to supervise, observe, and control the dispensing of fuels to insure that all safety requirements are met, and to insure that the waters of the state are not contaminated by fuel.
- (b) At unattended marine facilities an emergency shut off device must be installed to meet the following requirements:
 - (1) Installed between 20 to 100 feet from the fuel dispensing devices that they serve.
 - (2) Device must shut down the fuel dispensing system in the event of an emergency.
 - (3) Must be readily accessible to patrons.
 - (4) Emergency instructions must be conspicuously posted.

PART 21. MISCELLANEOUS SAFETY PROVISIONS

165:26-8-86. Required signs

All marinas must have a sign printed in ¼ to ½ inch text in black or red block capital letters on a white background conspicuously posted and easily readable from the dispensing area which says:

- (1) BEFORE FUELING:
 - (A) Stop all engines and auxiliaries.
 - (B) Shut off all electricity, open flames and heat sources.
 - (C) Check all bilges for fuel vapors.
 - (D) Extinguish all smoking materials.
 - (E) Close access fittings and openings to prevent fuel vapors from entering enclosed spaces of the vessel.
- (2) DURING FUELING:
 - (A) Maintain nozzle contact with the fill pipe.
 - (B) Wipe up spills immediately.
 - (C) Avoid overfilling.
 - (D) Fuel filling nozzle must be attended at all times.
- (3) AFTER FUELING:
 - (A) Inspect bilges for leakage and fuel odors.
 - (B) Ventilate until odors are gone.

165:26-8-88. Fire extinguishers

- (a) Each marina must be provided with listed fire extinguishers which have a minimum total capacity of 40 pounds, Class B, Class C.
- (b) A minimum of three extinguishers must be located at the fuel dock and one or more located so they will be within 50 ft. (15m) of each pump, dispenser, underground fill pipe opening and lubrication or service room.
- (c) Piers which extend more than 500 ft. (152 m) in travel distance from shore must have a Class III standpipe installed in accordance with NFPA 14, Standard for the Installation of Standpipe and Hose Systems.
- (d) There must be a knife at the fuel dock for quickly cutting mooring lines in an emergency and a push pole for shoving away a boat.

SUBCHAPTER 10. REQUIREMENTS FOR ABOVEGROUND STORAGE TANK SYSTEMS UTILIZED BY RETAIL FACILITIES

PART 1. GENERAL APPLICATION AND COMPLIANCE PROVISIONS

165:26-10-1. Application

- (a) This Subchapter applies to the storage, handling and use of all regulated substances which are kept in aboveground storage tanks, at facilities which engage in the retail sale of a Regulated Substance.
- (b) Subchapters 1 General Provisions, 2 General Requirements for AST's, 3 Release Prevention and Detection, and 4 Inspections, Penalties, and Field Citations shall also apply in addition to this Subchapter.

165:26-10-2. Timeframes for registration and compliance with rules

- (a) Tanks at retail facilities that are greater than 110 gallons must be registered with PSTD.
- (b) Temporary tanks may not be used at retail facilities.

PART 3. TANK DESIGN, CONSTRUCTION, CAPACITY AND LOCATION REQUIREMENTS

165:26-10-10. Maximum capacity for tanks

Aboveground storage tanks storing Class I and Class II liquids at an individual site must be limited to a maximum capacity of 12,000 gal. (45,600 L) and an aggregate capacity of 40,000 gal. (152,000 L). Other authorities having jurisdiction may have more stringent regulations.

SUBCHAPTER 12. REQUIREMENTS FOR ABOVEGROUND STORAGE TANK SYSTEMS UTILIZED AT FLEET AND COMMERCIAL FACILITIES

PART 1. GENERAL APPLICATION AND COMPLIANCE PROVISIONS

165:26-12-1. Application

(a) This Subchapter applies to the storage, handling and use of gasoline and diesel fuel at fleet and commercial facilities which are kept in aboveground storage tanks, with a an individual capacity of 2,100 gallons or more. Aboveground storage tanks with an individual capacity of less than 2,100 gallons are not subject to PSTD regulation, and may not access the Indemnity Fund in the event of a release from such aboveground storage tanks. Although PSTD does not regulate aboveground storage tanks with an individual capacity of less than 2,100 gallons, owners of such tanks should be aware they may be subject to regulation by other jurisdictions.

(b) Subchapters 1 General Provisions, 2 General Requirements for AST's, 3 Release Prevention and Detection, and 4 Inspections, Penalties, and Field Citations shall also apply in addition to this Subchapter.

165:26-12-2. Timeframes for registration and compliance with rules

(a) Tanks at fleet or commercial facilities with a capacity of 2,100 gallons or greater must be registered with PSTD.

(b) Temporary tanks may not be used at fleet and commercial facilities.

PART 3. TANK DESIGN, CONSTRUCTION, CAPACITY AND LOCATION REQUIREMENTS

165:26-12-10. Maximum capacity for tanks

Aboveground storage tanks storing Class I and Class II liquids at an individual site must be limited to a maximum capacity of 12,000 gal. (45,600 L) and an aggregate capacity of 40,000 gal. (152,000 L). Other authorities having jurisdiction may have more stringent regulations.

165:26-12-14. Tank distance requirements

No minimum distance is required between the tanks and the dispenser. Local jurisdictions may have more stringent regulations.

SUBCHAPTER 14. REQUIREMENTS FOR ABOVEGROUND STORAGE TANK SYSTEMS UTILIZED BY BULK PLANT FACILITIES

PART 1. GENERAL APPLICATION AND COMPLIANCE PROVISIONS

165:26-14-1. Application

(a) This Subchapter applies to the storage, handling and use of regulated substances at bulk plant facilities which are kept in aboveground storage tanks. Bulk plants built after July 15, 2000 must comply with this Chapter and Subchapter.

(b) Bulk plants, already in existence on July 15, 2000 will not be required to comply with these rules unless they pose a threat to property, people or the environment. If a safety or environmental threat does exist at a bulk plant, the owner will be required to correct the specific problem.

(c) Subchapters 1 General Provisions, 2 General Requirements for AST's, 3 Release Prevention and Detection, and 4 Inspections, Penalties, and Field Citations shall also apply in addition to this Subchapter.

165:26-14-2. Timeframes for registration and compliance with rules

(a) Tanks at bulk plants must be registered with PSTD. The tanks must come in compliance with the rules of this Subchapter before July 15, 2010. Compliance may be required sooner for any part of an existing bulk plant that poses a threat to property, people or the environment.

(b) Temporary tanks will not be allowed at bulk plant facilities.

PART 3. TANK DESIGN, CONSTRUCTION, CAPACITY AND LOCATION REQUIREMENTS

165:26-14-10. Maximum capacity for tanks

There is no maximum capacity restriction on bulk plants. Local jurisdictions may have more stringent regulations.

PART 15. DISPENSER REQUIREMENTS

165:26-14-60. Dispensers

Bulk plants which have, in addition to their distribution business, a facility for dispensing fuel directly into the fuel tanks of automobiles and trucks must comply with the dispenser requirements of retail facilities.

PART 16. LOADING FACILITIES

165:26-14-63. Location of loading facilities

Tank vehicle and tank car loading and unloading facilities must be separated from aboveground tanks, warehouses, other plant buildings or the nearest line of adjoining property that can be built upon by a distance of at least 25 ft (7.6 m) for Class I liquids and at least 15 ft (4.6 m) for Class II and Class III liquids, measured from the nearest fill spout or transfer connection.

165:26-14-64. Specific requirements for loading facilities

(a) Loading and unloading facilities must be provided with drainage systems or other means to contain spills.

(b) A loading or unloading facility that has a canopy or roof that does not limit the dissipation of heat or dispersion of flammable vapors and does not restrict fire-fighting access and control will be treated as an outdoor facility.

(c) Loading and unloading facilities at bulk plants that are used to load motor fuel into tank vehicles through open domes must be provided with a means for electrically bonding to protect against static electricity hazards.

(1) It must consist of a metal wire that is permanently and electrically connected to the bulk plant's fill pipe assembly or to some part of the bulk plant's rack structure

that is in electrical contact with the fill pipe assembly.

(2) The free end of this wire must have a clamp for convenient attachment to some metallic part of the vehicle that is in electrical contact with the cargo tank of the tank vehicle.

(3) All parts of the fill pipe assembly, including the drop tube, must form a continuous electrically conductive path.

(d) Bulk plants where motor fuel or blending materials are loaded or unloaded through open domes of railroad tank cars must be protected against stray electrical current by permanently bonding the bulk plant's fill pipe and the individual storage tanks to at least one rail of the railroad.

(e) Equipment such as piping, pumps, and meters used for the transfer of Class I liquids between storage tanks and the fill stem of the loading facility cannot be used for the transfer of Class II or Class III liquids.

(1) This provision does not apply to water-miscible liquid mixtures where the class of the mixture is determined by the concentration of liquid in water.

(2) This provision does not apply where the equipment is cleaned between transfers.

PART 17. TANK FILLING PROCEDURES

165:26-14-70. Tank filling operation

A delivery vehicle must be separated from any aboveground tank to which it is delivering fuel by at least 25 ft. (7.6 m) if possible.

(1) No minimum separation distance is required for storage tanks that are filled by gravity.

(2) The required minimum separation distance will be reduced to 15 ft. (4.6 m) where the fuel being delivered is not a Class I liquid.

165:26-14-71. Switch loading

To prevent hazards due to a change in flash point of liquids, no tank or tank vehicle that has previously contained a Class I liquid may be loaded with a Class II or Class III liquid unless proper precautions are taken.

PART 19. DISPENSING PROCEDURES

165:26-14-80. Dispensing fuel into tank vehicles

Tank vehicles must be loaded and unloaded as follows:

(1) Liquids can only be loaded into cargo tanks whose material of construction is compatible with the chemical characteristics of the liquid.

(2) The liquid being loaded must also be chemically compatible with the liquid hauled on the previous load unless the cargo tank has been cleaned.

(3) When transferring Class I liquids, engines of tank vehicles or motors of auxiliary or portable pumps must be shut down while making and breaking hose connections.

(4) If loading or unloading is done without requiring the use of the motor of the tank vehicle, the vehicle's motor must be shut down throughout any transfer operations involving Class I liquids.

(5) Filling through open domes into the tanks of tank vehicles must be by means of a

downspout that extends to within 6 in. of the bottom of the tank.

(6) When top loading a tank vehicle with Class I or Class II liquids without a vapor control system, valves used for the final control of flow must be of the self-closing type and must be manually held open, except where automatic means are provided for shutting off the flow when the vehicle is full.

(A) Automatic shutoff systems must be provided with a manual shutoff valve located at a safe distance from the loading nozzle to stop the flow if the automatic system fails.

(B) When bottom loading a tank vehicle, a positive means must be provided for loading a predetermined quantity of liquid, together with a secondary automatic shutoff control to prevent overflow.

(C) The connecting components between the loading rack and the tank vehicle that are required to operate the secondary control must be functionally compatible.

(D) The connection between the liquid loading hose or pipe and the truck piping must be by a dry disconnect coupling.

(7) When bottom loading a tank vehicle that is equipped for vapor control, but when vapor control is not used, the tank must be vented to the atmosphere, at a height not lower than the top of the cargo tank of the vehicle, to prevent pressurization of the tank. Connections to the facility's vapor control system must be designed to prevent the escape of vapor into the atmosphere when not connected to a tank vehicle.

(8) When bottom loading is used, reduced flow rates (until the fill opening is submerged), splash deflectors or other devices must be used to prevent splashing and to minimize turbulence.

(9) To allow for the relaxation of charge, metal or conductive objects, such as gauge tapes, sample containers and thermometers must not be lowered into a compartment while the compartment is being filled or immediately after pumping stops.

165:26-14-81. Static protection and bonding

Before loading tank vehicles through open domes, a bonding connection must be made to the vehicle or tank before dome covers are raised and must remain in place until filling is completed and all dome covers have been closed and secured.

PART 21. MISCELLANEOUS SAFETY PROVISIONS

165:26-14-86. Required signs

(a) Conspicuous and legible signs prohibiting smoking must be posted within sight of the customer being served.

(b) Warning signs must be conspicuously posted in the dispensing area incorporating the following or equivalent wording:

(1) WARNING: It is unlawful and dangerous to dispense gasoline into unapproved containers.

(2) NO SMOKING.

(3) STOP MOTOR.

SUBCHAPTER 16. REQUIREMENTS FOR ABOVEGROUND STORAGE TANK SYSTEMS UTILIZED BY EMERGENCY GENERATORS

PART 1. GENERAL APPLICATION AND COMPLIANCE PROVISIONS

165:26-16-1. Application

- (a) This Subchapter applies to the storage, handling and use of gasoline and diesel fuel kept in aboveground storage tanks for use in emergency generators.
- (b) Subchapters 1 General Provisions, 2 General Requirements for AST's, 3 Release Prevention and Detection, and 4 Inspections, Penalties, and Field Citations shall also apply in addition to this Subchapter.

165:26-16-2. Timeframes for registration and compliance with rules

- (a) Tanks that are greater than 110 gallons that contain fuel for emergency generators must be registered with PSTD. The tanks must have come into compliance with the rules of this Chapter and Subchapter before July 15, 2005.
- (b) There are emergency generators manufactured which have a fuel storage tank built into the unit. A manufactured unit will be accepted as being in full compliance with these rules if:
 - (1) The storage tank is double-walled and installed according to the manufacturer's specifications or;
 - (2) The storage tank is single walled with secondary containment built into the unit and installed according to the manufacturer's specifications; or
 - (3) Its location does not pose a threat to people, property or the environment.
- (c) If a manufactured unit has a single walled tank without built in containment, it must be installed in compliance with the containment provision of this Chapter.
- (d) If the fuel storage tank is separate from the generator unit, it must meet and be installed according to this Chapter.

APPENDIX G. FINE CITATIONS TABLE

Rule	Violation	Fine Amount
Registration & Permit Requirements		
165:26-1-41 and 165:26-1-42; 165:26-1-47 and 165:26-2-212	Failure to register tanks within 30 days of bringing the system into place, or failure to amend registration to reflect changes	\$500
165:26-1-70	Failure to pay AST permit fees prior to due date	Not > 50% of fee
165:26-2-5.1	Tank owner/operator accepting delivery into AST that does not have spill protection	\$1000
165:26-2-5.1 165:26-2-40 165:26-2-41	Tank owner/operator accepting delivery into AST that does have overfill protection or a required corrosion protection system	\$1,000
Notification Requirements		
	Failure to identify all storage tanks on notification form after third request, including a letter advising tank owner of the penalty	\$1,000
	Failure to provide installation information on notification form after third request, including a letter advising tank owner of the penalty	\$1,000
	Failure to notify the OCC prior to AST installation or closure.	\$500
	Failure to report non-passing tank or line tightness test results.	\$500
Required Reports		
165:26-1-57	Failure to submit tank closure report within 45 days	\$250
165:29 and 165:26-3-171	Failure to submit required reports pertaining to suspected release investigations and/or corrective action activities in a timely manner	\$250
	Second offense and thereafter for same case or tracking number	\$500
General Leak Detection Requirements		
165:26-3-77	Failure to notify Commission of indicated release	\$250
165:26-3-20.2 and 165:26-20.1	Failure to provide adequate release or leak detection for storage tank system (first offense)	\$250
	Second Offense	\$500

Rule	Violation	Fine Amount
	Third Offense	\$1,000
	Failure to monitor tank(s) for releases as required	\$250
165:26-3-20.2	Failure to use approved release or leak monitoring method for piping	\$250
165:26-1-55, 165:26-1-57, and 165:26-1-59	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
165:26-3-20.2	Failure to install or inspect leak detection on pressure piping	\$250
Spill & Overfill Control		
165:26-3-77	Failure to report a spill (over 25 gallons)	\$100
165:26-3-171	Failure to investigate a spill (over 25 gallons)	\$100
	Failure to investigate an overfill spill	\$100
	Failure to clean up a spill	\$500
	Failure to clean up an overfill spill	\$500
Operation/Maintenance of Corrosion Protection		
165:26-2-40 and 165:26-2-41	Failure to properly operate and maintain corrosion protection system (first offense)	\$150
	Second Offense	\$500
	Third Offense	\$1,000
165:26-2-42	Failure to properly test corrosion protection system	\$250
165:26-1-57	Failure to maintain records of cathodic protection inspections or testing	\$250
165:26-2-42	Failure to use a qualified cathodic protection tester to inspect corrosion protection system at least once every three years (first offense)	\$500
	Second Offense	\$1,000
165:26-1-58; 165:26-2-40	Failure to provide a Cathodic Protection Design or Suitability Study	\$1,000

Rule	Violation	Fine Amount
Release Investigation & Confirmation		
165:26-1-48 and 165:26-3-171	Failure to conduct tightness test(s) to investigate suspected leak(s)	\$250
Temporary Closure		
165:26-2-211	Failure to secure all storage tank-related equipment for temporary closure Failure to operate and maintain release or leak detection as required in a temporarily closed storage tank system	\$250
Permanent Closure		
165:26-2-214	Failure to measure for the presence of a release before a permanent closure	\$500
165:26-1-57	Failure to maintain proper closure records	\$250
165:26-2-210	Failure to use licensed AST Remover	\$500
Repairs Allowed		
165:26-2-1.1 165:26-2-191	Failure to use an AST licensee to install or repair person to repair	\$500
	Second offense or thereafter by owner (per owner, not per facility)	\$1000
165:26-2-42	Failure to test storage tank systems cathodic protection within 6 months of repair	\$250
165:26-2-8	Failure to perform tightness test on tank system after installation or repair	\$300
165:26-1-56	Failure to maintain repair records for operating life of storage tank	\$250

Rule	Violation	Fine Amount
Other		
165:15-19-1	Misrepresentation of octane level per location	\$500
	Second Offense within a year	\$1000
	Third Offense –Closure & Hearing	\$5000
165:26-1-31	Failure to follow standard codes for installation	\$500
165:26-4-1	Failure to provide records upon request	\$100
	Second offense or thereafter by owner (per owner, not per facility)	\$500
Administrative Penalty	Any owner or operator of a storage tank who fails to comply with any order issued by the Commission for corrective or enforcement actions may be subject, after notice and hearing, to an administrative penalty in an amount as allowed by law.	

APPENDIX H. SPACING (SHELL TO SHELL) BETWEEN ADJACENT TANKS

Fixed or Horizontal Tanks

	Floating Roof Tanks	Class I or II Liquids	Class IIIA Liquids
Tanks not over 150 ft in diameter	1/6 sum of adjacent tank diameters but not less than 3 ft.	1/6 sum of adjacent tank diameters but not less than 3 ft.	1/6 sum of adjacent tank diameters but not less than 3 ft.
Tanks larger than 150 ft in diameter			
If remote impounding is provided in accordance with 2-3.4.2	1/6 sum of adjacent tank diameters	¼ sum of adjacent tank diameters	1/6 sum of adjacent tank diameters
If diking is provided in accordance with 2-3.4.3	¼ sum of adjacent tank diameters	1/3 sum of adjacent tank diameters	1/4 sum of adjacent tank diameters

APPENDIX I. TOTAL CAPACITY OF VENTING DEVICES

Table Wetted Area versus ft³ (Cubic Feet) Free Air per Hour [14.7 psia and 60°F (101.3 kPa and 15.6°C)].

ft ²	CFH	CFH
20	21,100	
30	31,600	
40	42,100	
50	52,700	
60	63,200	
70	73,700	
80	84,200	
90	94,800	
100		105,000
120		126,000
140		147,000
160		168,000
180		190,000
200		211,000
250		239,000
300		265,000
350		288,000
400		312,000
500		354,000
600		392,000
700		428,000
800		462,000
900		493,000
1000		524,000
1200		557,000
1400		587,000
1600		614,000
1800		639,000
2000		662,000
2400		704,000
2800 & over		742,000

SI units: 10 ft² = 0.93 m²; 36 ft³ = 1.0 m³.
Interpolate for intermediate values.

APPENDIX J. TABLE ESTABLISHING PERMEABILITY RATES FOR SECONDARY CONTAINMENT

Substance Classification	If groundwater or bedrock is <10 feet from grade or AST is within 100 feet of Class 2 water	If groundwater or bedrock is > 10 feet from grade and AST is not within 100 feet of Class 2 water
Type A	Minimum of three feet of soil at 1×10^{-5} cm/sec	Minimum of three feet of soil at 1×10^{-4} cm/sec
Type B	Minimum of three feet of soil at 1×10^{-4} cm/sec	Minimum of three feet of soil at 1×10^{-3} cm/sec
Type C	Minimum of three feet of soil at 1×10^{-3} cm/sec	No minimum permeability standard

(A) Type A substances include gasoline, aviation gas, naphtha, denatured ethanol, antifreeze, mixtures or blends of these substances.

(B) Type B substances include diesel, kerosene, jet fuel, fuel oil types 1 through 4, virgin lube oil, used oils and mixtures or blends of these substances with Type C substances.

(C) Type C substances include fuel oil types 5 and 6 and other regulated Substances.