

**TITLE 165. CORPORATION COMMISSION
CHAPTER 29. CORRECTIVE ACTION OF PETROLEUM
STORAGE TANK RELEASES**

**RM 201600014
DRAFT PROPOSED RULES
August 8, 2016**

**A brief explanation for the proposed amendment
is provided after each rule**

CHAPTER 29. CORRECTIVE ACTION OF PETROLEUM STORAGE TANK RELEASES

SUBCHAPTER 1. GENERAL PROVISIONS

PART 3. DEFINITIONS

165:29-1-11. Definitions

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

"**ANSI**" means the American National Standards Institute.

"**API**" means the American Petroleum Institute.

"**ASTM**" means the American Society for Testing and Materials.

"**Abandoned system**" means a storage tank system that has not been removed but has been taken out of service and is not intended to be returned to service, or that has been rendered permanently unfit for use as determined by the Commission, including all tanks closed prior to April 21, 1989.

"**Aboveground release**" means any release to the surface of the land or to surface water. It includes, but is not limited to, releases from the aboveground portion of an underground storage tank system and aboveground releases associated with overfills and transfer operations as the regulated substance moves to or from an underground storage tank system.

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

"**Aquifer**" means a formation that contains sufficient saturated, permeable material to yield significant quantities of water to wells and springs. This implies an ability to store and transmit water for beneficial uses.

"**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 a petroleum storage tank.

"**Backfill**" refers to only the material placed in the excavation zone to support the petroleum storage tank system.

"**Belowground release**" means any release to the subsurface of the land or to groundwater. It includes, but is not limited to, releases from belowground portions of petroleum storage tank systems and belowground releases associated with overfills and transfer operations as the regulated substance moves to or from underground storage tank systems. "Belowground release" does not include releases to a secondary containment system.

"**Beneath the surface of the ground**" means beneath the ground's surface or otherwise covered with materials so that physical inspection is precluded or impaired.

"**Beneficial uses**" means a classification of the waters of the State, according to their best uses in the interest of the public.

"**COC**" means Chemical of Concern.

"**Commission**" 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 petroleum storage tank system under conditions likely to be encountered in the system.

"**Confirmed Release**" means a release of ~~petroleum~~ a regulated substance from a regulated storage tank system resulting in ~~levels of chemicals of concern in native soils and/or groundwater that exceed state action levels~~ free product, contaminated soils or groundwater that exceed state action levels, organic vapor readings significantly above background levels, petroleum staining or odors or any other indication that a release has occurred that could be harmful to human health, safety or the environment and to which a PSTD case number is assigned and further corrective action is required.

"**Contaminants**" or "**contamination**" means concentrations of regulated substances or dissolved compounds therefrom at levels that may cause adverse human health or environmental effects.

"**Corrective action**" means action taken to assess, monitor, minimize, eliminate or clean up a release from a storage tank system.

"**Corrective Action Plan**" means any plan submitted to the Division detailing the method and manner of corrective action to be taken for a release.

"**DAF**" means Dilution Attenuation Factor.

"**DEQ**" means the Oklahoma Department of Environmental Quality.

"**DWS**" means Drinking Water Standards.

"**de minimis**" means, for the purposes of this Chapter, very small, as in very small amounts or concentrations of regulated substances.

"**Dielectric material**" means a material that does not conduct direct electric current. Dielectric coatings are used to electrically isolate underground storage tank systems from the surrounding area. Dielectric bushings are used to electrically isolate portions of the underground storage tank system (e.g., tank from piping).

"**Dilution Attenuation Factor**" or "**DAF**" means a unitless number greater than or equal to unity and represents the ratio of dissolved phase concentration at a downgradient location to the concentration at an upgradient location. It represents the reduction in concentration due to the combined influence of several factors (diffusion, dispersion, adsorption, decay, volatilization). It is applicable for all media, but is most commonly used for the unsaturated and saturated zones. DAF is generally estimated using a fate and transport model or based on site-specific data.

"**Director**" means the Director of the Petroleum Storage Tank Division of the Corporation Commission.

"**Division**" means the Petroleum Storage Tank Division of the Corporation Commission.

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

"**Electrical equipment**" means underground equipment that contains dielectric fluid necessary for the operation of equipment such as transformers and buried electric cable.

"**Electronic signature**" means any information in digital form that is included in or logically associated with an electronic document for the purpose of expressing the same meaning and intention as would a handwritten signature if affixed to an equivalent paper document with the same reference to the same content.

"**Environment**" means any water, water vapor, any land including land surface or subsurface, fish, wildlife, air and atmosphere, and all other natural resources.

"Environmental experience" means work-related experience in any type of activities associated with soil, water or atmosphere impacted or potentially impacted by a **hazardous PSTD regulated** substance.

"Excavation zone" means the volume containing the underground storage tank system and backfill materials, bounded by the ground surface, walls, and floor of the pit and trenches into which the underground storage tank system is placed at the time of installation.

"Facility" means any location or part thereof consisting of one or more petroleum storage tanks or systems containing regulated substances.

"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.

"FOC" means fraction organic carbon content.

"Fraction organic carbon content" or **"FOC"** means the fraction of organic carbon in soil that influences the adsorption of organic chemicals. It can be estimated in soils using high temperature combustion and oxidation techniques such as ASTM method D2974.

"Free product" means a regulated substance that is present as a non-aqueous phase liquid (e.g., liquid not dissolved in water).

"Fresh groundwater" means groundwater with total dissolved solids (TDS) less than five thousand (5,000) parts per million.

"Fund" means the Petroleum Storage Tank Release Environmental Cleanup Indemnity Fund.

"Gathering lines" means any pipeline, equipment, facility, or building used in the transportation of oil or gas during its production or gathering operations.

"Groundwater" means that part of water that is below the water table.

"Half-life" means the time required for the decay or transformation of one half of the amount of a chemical.

"Hazard Index" means the sum of the Hazard Quotients.

"Hazard Quotient" means the estimated dose, or intake, for a specific chemical and a specific pathway, divided by the Reference Dose (RfD).

"Impervious barrier" means a barrier of sufficient thickness, density, and composition that 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 is not abandoned, or could contain regulated substances, and/or has regulated substances regularly added to or withdrawn from it.

"Inventory controls" means techniques used to identify a loss of regulated substances that are based on volumetric measurements in the tank and reconciliation of those measurements with product delivery and withdrawal records.

"Licensed Environmental Consultant" means an individual who has a current license issued by the Petroleum Storage Tank Division to perform corrective action.

"Liquid trap" means sumps, well cellars, and other traps used in association with oil or gas production, gathering, and extraction operations (including gas production plants) to collect oil, water, and other liquids. Liquid traps may temporarily collect liquids for subsequent disposition

or reinjection into a production or pipeline stream, or may collect and separate liquids from a gas stream.

"**MCL**" means Maximum Contaminant Level.

"**MtBE**" means methyl tertiary butyl ether.

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

"**Motor fuel**" means any petroleum product, oxygenate, or blend of products, that is suitable for use as a fuel in an internal combustion or diesel engine .

"**Monitor well**" means a piezometer or other cased and screened excavation, boring or drilled hole installed in any way that can be used for the continuous or periodic evaluation of groundwater quality or the detection of soil vapors.

"**NACE**" means the National Association of Corrosion Engineers.

"**NFPA**" means the National Fire Protection Association, Inc.

"**NPDES**" means the National Pollutant Discharge Elimination System.

"**Occurrence**" means the release of a PSTD regulated substance into the soil or groundwater. Each PSTD regulated substance will be treated as one occurrence regardless of the composition of the substance released. Separate occurrences of the same PSTD regulated substance may be allowed if evidence establishes that the PSTD regulated substance occurred in two different tank systems locations, are separated by time, or both.

"**ORBCA**" or "**Oklahoma Risk-Based Corrective Action**" means a scientific risk-based analysis that governs petroleum storage tank site assessment and remediation. It determines acceptable concentration levels of petroleum constituents in order to protect the public health, safety or welfare or the environment.

"**OSDA**" means the Oklahoma State Department of Agriculture.

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

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

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

"**Overfill**" means a release that occurs when a petroleum storage tank is filled beyond its capacity, resulting in a discharge of regulated substance to the environment.

"**PEI**" means the Petroleum Equipment Institute.

"**POC**" means Point of Compliance.

"**POE**" means Point of Exposure.

"**PSI**" means pounds per square inch.

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

"**Pay-for-Performance (PFP)**" means a process where an environmental consulting company (Consultant) guarantees by signing a mutual agreement (the contract) that a release of a regulated substance will be remediated to COC levels agreed to by the PSTD and the Consultant that are protective of human health, safety and the environment. This performance-based process encompasses several steps, but is not limited to the contract signed by an officer/owner of the environmental consulting company, the applicant and the Administrator of the Indemnity Fund and an agreed to reasonable price. Scheduled payments are distributed only as performance-based goals are attained.

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

"Petroleum" means antifreeze, motor oil, gasoline, diesel, aviation fuel, and/or volatile blending materials used in motor fuels, like kerosene and ethanol and used oil.

"Pipe" or "Piping" means a hollow cylinder or tubular conduit constructed of non-earthen materials.

"Pipeline facilities" means new and existing pipe rights-of-way and any equipment, facilities, or buildings regulated under:

(A) The Natural Gas Pipeline Safety Act of 1968 (49 U.S.C. § 1671, et seq.).

(B) The Hazardous Liquid Pipeline Safety Act of 1979 (49 U.S.C. § 2001, et seq.).

(C) The State Hazardous Liquid Transportation System Safety Act, § 47.1 et seq. of Title 52 of the Oklahoma Statutes.

(D) Intrastate pipeline facilities regulated under state laws.

"Point of Compliance" means a select location where the concentration of a chemical released must be at or below back-calculated levels. The back-calculated levels are such that estimated concentrations at the Point of Exposure are below health-based levels.

"Point of Exposure" means a location at which an individual or population may be exposed to site-specific Chemicals of Concern through ingestion, inhalation and/or dermal contact.

"Pollution" means contamination or other alteration of the physical, chemical or biological properties of any natural waters of the state, or contamination or alteration of the physical, chemical or biological properties of the land surface or subsurface, when such contamination or alteration will or is likely to create a nuisance or render the waters or land harmful to the public health, safety or welfare, or the environment.

"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 a release from a petroleum storage tank system may have occurred.

"Potency Factor" means the plausible upper-bound estimate of the probability of a response (cancer) per unit intake of chemical over a lifetime. Also referred to as Slope Factor.

"RBCA" means Risk-Based Corrective Action.

"RfD" means Reference Dose.

"Reasonable Maximum Exposure" or "RME" means the highest rate of exposure that has a small probability (5 percent) of being exceeded.

"Reference Dose" or "RfD" means the estimate of the daily intake of a chemical over a lifetime that is not likely to result in any significant adverse health effects (including in sensitive subpopulations).

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

"Release" means any spilling, overfilling, or leaking, discharging, emitting, or escaping of a regulated substance from a regulated storage tank system ~~that goes beyond the excavation zone, tank pit, or secondary containment facility into the native environment or any concentrations of a regulated substance that as determined by the PSTD poses a threat to human health or the environment~~ onto the ground surface or into the groundwater, surface water or subsurface soils.

"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.

"Remediation" process or technique used to reduce concentration levels of regulated substances in the soil and groundwater, and, or to reduce the presence of free product in the environment to levels that are protective of human health, safety and the environment. Generally remediation activities are scheduled after the site assessment is complete and the Remedial Action Plan (RAP) has been approved.

"Repair" means to restore a tank or petroleum storage tank system component to PSTD standards that has caused a release of regulated substances from the petroleum storage tank system.

"Reportable Quantity" or **"RQ"** means the amount of a ~~hazardous~~ PSTD regulated substance release required to be reported to appropriate federal, state, and/or local officials.

"Residual Product" Petroleum hydrocarbons (product) that are absorbed or otherwise bound to geological materials (sand, silt, or clay) in any soil zone (vadose, capillary, or saturated zone), in such a manner that ground water in contact with the residual product or beneath the residual product is not contaminated with any petroleum constituent regulated by the OCC.

"Risk-Based Corrective Action" means all of the activities necessary to manage a site such that concentrations of chemicals from a release are at levels that are not detrimental to public health and the environment. It includes, but is not limited to, collection of site-specific data, analysis of the data to quantify the risk, comparison of the risk with acceptable levels, and implementation of engineering and non-engineering measures to ensure that concentrations of remaining Chemicals of Concern are not detrimental to human health.

"SCL" means Soil Cleanup Level.

"STI" means the Steel Tank Institute.

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

"Saturated zone" means a subsurface zone below which all pore space is filled with water.

"Slope Factor" means the plausible upper-bound estimate of the probability of a response (cancer) per unit intake of chemical over a lifetime. Also referred to as Potency Factor.

"Smear Zone" Any soil zone containing petroleum hydrocarbons that can contaminate ground water in contact with the petroleum hydrocarbons or ground water beneath the petroleum hydrocarbons with petroleum constituents regulated by the PSTD.

"Soil zone" means and includes, but is not limited to, vadose zone, capillary fringe, or saturated soil zone.

"Source of contamination" means the location of the highest concentration of chemical contaminants in soil and groundwater.

"Source of release" means the location where regulated substances from a regulated tank system entered the environment.

"Spill" means a release that occurs during transfer operations of PSTD regulated substances to or from a petroleum storage tank system, resulting in a discharge of such substances into the environment.

"Storage Tank System" means one or a combination of tanks, including piping, hoses, dispensers and other system equipment used to contain regulated substances.

"Stormwater collection system" or **"wastewater collection system"** means piping, pumps, conduits, and any other equipment necessary to collect and transport surface water runoff resulting from precipitation or domestic, commercial, or industrial wastewater to and from retention areas or any areas where treatment is designated to occur. The collection of stormwater and wastewater does not include treatment except where incidental to conveyance.

"Surface impoundment" means a natural topographic depression, man-made excavation, or diked area formed primarily of earthen materials (although it may be lined with man-made materials) that is not an injection well.

~~**"Suspected release (SOR)"** means an event has occurred that establishes a reasonable basis to believe a release from a petroleum storage tank system may have occurred.~~

"Suspicion of Release" ("SOR") means preliminary investigative work performed under a PSTD Purchase Order to determine if a release of a regulated substance has occurred. A modified eligibility process for a SOR is required.

"TCLP" means toxicity characteristic leaching procedure, a test procedure for determining if a solid waste is hazardous because it exhibits toxicity characteristics as enforced under Resource Conservation and Recovery Act.

"TDS" means Total Dissolved Solids.

"TPH" means Total Petroleum Hydrocarbon(s).

"Target Risk Level" means the level set by the Oklahoma Corporation Commission that must be achieved at each site prior to a risk-based closure of the site. For example, for current receptors this level has been set at 1E-06 (one-in-a-million) and a Hazard Quotient of less than 1.0 (one).

"Temporary out of use" or "TOU" means the status of a petroleum storage tank system that has been taken out of service/use but not removed with the intent to return to service.

"Transporter" means any person who transports, delivers, or distributes any quantity of regulated substance from one point to another.

"UL" means Underwriter's Laboratory.

"USGS" means the United States Geological Survey.

"Usable groundwater" means fresh groundwater that may be produced from an aquifer for beneficial uses.

"Unsaturated zone" or "vadose zone" means the subsurface zone containing water under pressure less than that of the atmosphere, including water held by capillary forces within the soil, and containing air or gases generally under atmospheric pressure. This zone is limited by the ground surface and the upper surfaces of the water table.

"Waters of the State" means all bodies or accumulations of water, surface and/or underground, natural or artificial, and public or private, which are contained within, flow through, or border upon any part of the State of Oklahoma or any portion thereof.

The definitions are being revised to expand and clarify what constitutes a confirmed release and a suspicion of release; add a definition for electronic signature; delete hazardous substance language since jurisdiction is with DEQ; and expand the definition of release to more closely match the federal definition in 40 CFR 280.12.

PART 7. NATIONAL INDUSTRY CODES

165:29-1-31. Sources of standards

The standards referenced in this Chapter are available for inspection at the Petroleum Storage Tank Division offices during regular business hours and from the following sources:

(1) American Petroleum Institute (API), 1220 L. Street, N.W., Washington, D.C. 20005-4070. Telephone (202) 682-8375.

- (2) National Association of Corrosion Engineers (NACE), P.O. Box 218340, Houston, Texas 77218-8340. Telephone (281) 228-6200.
- (3) National Fire Protection Association (NFPA), 1 Batterymarch Park, Quincy, Massachusetts 02269-9101. Telephone (800) 344-3555.
- (4) American Society for Testing and Materials (ASTM), 100 Barr Harbor Drive, West Conshohocken, Pennsylvania 19428-2959. Telephone (610) 832-9585.
- (5) Underwriter's Laboratory (UL), 333 Pfingston Road, Northbrook, Illinois 60062-2096. Telephone (847) 272-8800, ext. 42612.
- (6) Petroleum Equipment Institute (PEI), P.O. Box 2380, Tulsa, Oklahoma 74101-2380. Telephone (918) 494-9696.
- (7) Steel Tank Institute (STI), 570 Oakwood Road, Lake Zurich, Illinois 60047. Telephone (847) 438-8265.
- (8) American Society of Mechanical Engineers (ASME/ANSI), 22 Law Drive, P.O. Box 2300, Fairfield, New Jersey 07007-2300. Telephone (800) 843-2763.
- (9) National Ground Water Association (~~formerly National Water Well Association~~), 601 Dempsey Road, Westerville, Ohio 43081. Telephone (800) 551-7379.
- (10) United States Environmental Protection Agency
 - (A) National Service Center for Environmental Publications (NSCEP), Box 42419, Cincinnati, Ohio 45242. Telephone (800) 490-9198.
 - (B) Office of Underground Storage Tanks (OUST), 1200 Pennsylvania Avenue N.W., Mail Code 5401G, Washington, DC 20460. Telephone (800) 424-9346.

The revision deletes the reference to an older name of the association which is no longer used.

165:29-1-32. Incorporated codes and standards

Specific references to documents listed in (1) through (13) below are made throughout this Chapter. Each of these documents or parts thereof are adopted and incorporated by reference as standards, but only to the extent that they are specifically referenced in this Chapter. These rules will supercede in any conflict between these rules and any standard. These codes and standards will be updated periodically through a formal rulemaking procedure initiated by PSTD to reflect any substantive or relevant changes.

- (1) National Fire Protection Association Standards:
 - (A) Standard Number 30, 2015, "Flammable and Combustible Liquids Code."
 - (B) Standard Number 329, 2015, "Handling Releases of Flammable and Combustible Liquids and Gases."
 - (C) Standard Number 385, 2012, "Tank Vehicles for Flammable and Combustible Liquids."
 - (D) Standard Number 326, 2015, "Safeguarding of Tanks and Containers for Entry, Cleaning or Repair."
 - (E) Standard Number 30A, 2015, "Motor Fuel Dispensing Facilities and Repair Garages."
- (2) American Petroleum Institute Standards:
 - (A) Recommended Practice 1615, 2011, "Installation of Underground Hazardous Substances or Petroleum Storage Systems."

- (B) Recommended Practice 1632, 2002, "Cathodic Protection of Underground Storage Tank and Piping Systems."
 - (C) Recommended Practice 1604, R2010, "Closure of Underground Petroleum Storage Tanks, 3rd Edition."
 - (D) Recommended Practice 1631, 2001, "Interior Lining and Periodic Inspection of Underground Storage Tanks."
 - (E) Recommended Practice 1621, 2012, "Bulk Liquid Stock Control at Retail Outlets."
 - (F) Recommended Practice 1626, 2010, "Storing and Handling Ethanol and Gasoline - Ethanol Blends at Distribution Terminals and Service Stations."
 - (G) Recommended Practice 1627, 1993, "Storing and Handling of Gasoline - Methanol/Cosolvent Blends at Distribution Terminals and Service Stations."
 - (H) Publication 1628, 1996, "A Guide to the Assessment and Remediation of Underground Petroleum Releases."
 - (I) Publication 2200, ~~2010~~ [2015](#), "Repairing Crude Oil, Liquefied Petroleum Gas, and Product Pipelines, 4th Edition."
 - (J) Publication 2015, ~~2004~~ [2014](#), "Requirements for Safe Entry and Cleaning of Petroleum Storage Tanks."
- (3) National Association of Corrosion Engineers:
- (A) Standard Number SP0169-2013, "Control of External Corrosion on Underground or Submerged Metallic Piping Systems."
 - (B) Standard Number SP0285-2011, "External Corrosion Control of Underground Storage Tank Systems by Cathodic Protection."
 - (C) Standard Number SP-0286-2007, "Electrical Isolation of Cathodically Protected Pipelines."
- (4) Underwriter's Laboratory Standards:
- (A) Standard UL58, 9th Edition, 1996, "Steel Underground Tanks for Flammable and Combustible Liquids."
 - (B) Standard UL1316, Bulletin-2013, "Glass-Fiber-Reinforced Plastic Underground Storage Tanks for Petroleum Products, Alcohols, and Alcohol-Gasoline Mixtures."
 - (C) Standard UL1746, Bulletin-2013, "External Corrosion Protection Systems for Steel Underground Storage Tanks."
 - (D) Standard UL567, ~~Bulletin-2012~~ [2014](#), "Emergency Breakaway Fittings, Swivel Connectors and Pipe-Connection Fittings for Petroleum Products and LP-Gas."
- (5) Petroleum Equipment Institute PEI/RP 100 (2011 Edition), "Recommended Practices for Installation of Underground Liquid Storage Systems."
- (6) Steel Tank Institute F894, ACT-100, "Specification for External Corrosion Protection of FRP Composite Underground Steel Storage Tanks 2006."
- (7) Factory Mutual 1920 (2007), "Pipe Coupling and Fitting for Aboveground Fire Protection Systems."
- (8) National Leak Prevention Association Standard 631, "Spill Prevention, Minimum 10 Year Life Extension, Existing Steel UST by Lining Without Additional Cathodic Protection."
- (9) National ~~Water Well~~ [Groundwater](#) Association, 1986, "RCRA Ground Water Monitoring Technical Enforcement Guidance Document (TEGD)."
- (10) American Society for Testing and Materials, ASTM Designation: E 1739-95 2015, Standard Guide for Risk-Based Corrective Action Applied at Petroleum Release Sites."

(11) U.S. Environmental Protection Agency Office of Water, 1997, Drinking Water Advisory: Consumer Acceptability Advice on Health Effects Analysis on Methyl Tertiary-Butyl Ether (MtBE).

The revision is to update standards to the current edition as provided in 75 O.S. § 251 and to correct the name of the association.

SUBCHAPTER 3. RELEASE PREVENTION, DETECTION AND CORRECTION

PART 1. RELEASE PROHIBITION, REPORTING, AND INVESTIGATION

165:29-3-3. Release investigation; confirmed release; suspected release; emergency suspected release and release reporting

(a) **Duty to inspect for release.** Owners and operators of storage tanks must routinely inspect and conduct necessary testing of their storage tanks to prevent spilling, overfilling, or leaking from a storage tank system into the native environment. The owner or operator of a petroleum storage tank system must take the following steps or use other procedures approved by PSTD:

(1) **System test.** Owners or operators must conduct petroleum storage tank system tightness tests and, if applicable containment testing, that will determine whether a ~~leak~~ release exists in the portion of the tank that routinely contains regulated substances and the attached delivery piping or a breach of either wall of the secondary containment has occurred. If the test results for the system, tank, ~~or~~ delivery piping, or interstice indicate that a leak exists, the owner or operator must repair, remove, replace, or ~~upgrade~~ permanently close as defined in OAC 165:25-2-135 the petroleum storage tank system, delivery piping, or interstice and begin a site check. Further investigation is not required if the test results for the system, tank, ~~and~~ delivery piping, and interstice 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. However, the owner or operator must conduct a site check as described in (B) below if the test results for the system, tank, ~~and~~ delivery piping, or interstice do not indicate that a ~~leak~~ release exists, but indicator chemical concentrations detected in soil or water are above action levels cited in (b) of this Section.

(2) **Site check.** The owner or operator must measure for the presence of a release where released regulated substances are most likely to be present at the petroleum storage tank system site. In selecting sample types, locations, depths and measurement methods, owners 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 from the outside of the petroleum storage tank system in native soil or another location approved by the PSTD. Analyses for both BTEX constituents and the appropriate TPH must be obtained in all cases. For sites where used oil may be involved, as determined through a TPH analysis, TCLP analysis for metals, semi-volatiles, and volatiles may be required. The TCLP results will be used on a case-by-case basis to establish cleanup levels or to refer the case to the DEQ for regulation. The selected method must be able to

detect the most stringent cleanup levels required in this Chapter. The Total Petroleum Hydrocarbon (TPH) Laboratory Methodology 418.1 will not be accepted for this Chapter.

(A) If the test results for soil and/or groundwater taken outside the excavation zone or the petroleum storage tank system site confirm that a release has occurred, the owner or operator must begin the required corrective action in accordance with this Subchapter.

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

(b) Confirmed release.

(1) When one or more of the following is present from a petroleum storage tank system, a release may be considered confirmed and a confirmed release case may be activated by PSTD staff.

(A) Free product ~~is found anywhere.~~

(B) Contaminated groundwater ~~is found outside the excavation zone~~ and/or soil that exceed OCC action levels.

(C) Contaminated "soil zone" ~~is found outside the excavation zone~~ Organic vapor readings above background levels.

(D) Actionable levels of petroleum staining or odors.

(E) Any other indication that a release from a regulated petroleum storage tank system has occurred that is harmful to human health, safety or the environment.

~~(2) Any contamination from a regulated substance having concentrations determined by PSTD to be harmful to human health or the environment.~~

~~(3)~~ (2) Laboratory analysis of levels of chemical constituent concentrations that may be required to confirm a case are:

(A) Benzene

(i) Native Soils - 0.5 mg/kg

(ii) Groundwater - 0.005 mg/l

(B) Toluene

(i) Native Soils - 40.0 mg/kg

(ii) Groundwater - 1.0 mg/l

(C) Ethyl Benzene

(i) Native Soils - 15.0 mg/kg

(ii) Groundwater - 0.7 mg/l

(D) Xylene

(i) Native Soils - 200.0 mg/kg

(ii) Groundwater - 10.0 mg/l

(E) TPH

(i) Native Soils - 50.0 mg/kg

(ii) Groundwater - 2.0 mg/l

(iii) If BTEX concentrations are below action levels, a TPH concentration of 500 mg/kg may be required to confirm a case.

(c) **Suspected release.** When an owner, operator, or their agent has reason to believe that a release from a storage tank may have occurred, he or she must notify PSTD within 24 hours and receive authorization from the Division prior to initiating any investigation for which subsequent payment from the Indemnity Fund may be sought.

(d) **Emergency suspected release.** Owners, operators, or their agent may begin investigation of suspected releases when the suspected release may cause immediate harm to the public health, safety, welfare or the environment. The Petroleum Storage Tank Division will approve and reimburse expenses for an investigation after it has been performed and prior to the issuance of a Suspicion of Release by the Petroleum Storage Tank Division when the owner or operator has reasonably acted upon the belief that the suspected release gave rise to the need for immediate emergency action. The determination of whether or not action was reasonable is within the discretion of PSTD.

(e) **Release reporting.** Within 20 days after the reporting of a release, the owner or operator must submit a report to PSTD summarizing the steps taken under this Section and any resulting information. If a release is confirmed through performance of the steps taken under this Section, then the report must be submitted on PSTD-specified forms and no other abatement measures or site checks are required.

The rule is being amended to incorporate the federal requirements for release investigation for interstitial integrity testing where appropriate (40 CFR 280.50); and to expand and clarify what constitutes a confirmed release.