

BEFORE THE CORPORATION COMMISSION OF THE STATE OF OKLAHOMA

IN THE MATTER OF A PERMANENT
RULEMAKING OF THE OKLAHOMA
CORPORATION COMMISSION AMENDING
OAC 165:29, CORRECTIVE ACTION OF
PETROLEUM STORAGE TANK RELEASES

CASE NO. RM2023-000013

PETROLEUM STORAGE TANK DIVISION'S PROPOSED RULES AMENDING
CHAPTER 29. CORRECTIVE ACTION OF PETROLEUM STORAGE TANK
RELEASES

(As of November 20, 2023)

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

SUBCHAPTER 1. GENERAL PROVISIONS

PART 1. PURPOSE AND STATUTORY AUTHORITY

165:29-1-2. Contents

This Chapter sets forth specific requirements for corrective action of releases including the investigation, site assessment, ~~cleanup~~remediate, public notice, and monitoring of systems.

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 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, delivery piping, or interstice indicate that a leak exists, the owner or operator must repair, remove, replace, or permanently closed 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, 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, delivery piping and interstice do not indicate that a 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 five feet (5') 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~~risk levels or to refer the case to the ~~DEQ~~ODEQ for regulation. The selected method must be able to detect the most stringent ~~cleanup~~risk 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.

(B) Contaminated groundwater and/or soil that exceed OCC action levels.

(C) 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) 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 in soil may be required to confirm a case at the discretion of PSTD.

(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 twenty-four (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 twenty (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 in a format established by PSTD within the required timeframe, after which corrective action may be required under the provisions of this Chapter.

PART 3. REMOVAL AND CLOSURE OF PETROLEUM STORAGE TANK SYSTEMS

165:29-3-65. Assessing backfill material at closure or change in service

(a) As directed by PSTD, backfill material that is removed when an underground storage tank or associated piping is removed from the subsurface may be tested for BTEX, TPH (GRO and/or DRO, whichever is appropriate) and total lead, if appropriate.

(b) As directed by PSTD excavated backfill material may be sampled at a rate of one composite sample (composed of 10 grab samples) per 50 cubic yards of material, which must be analyzed by a laboratory ~~certified by DEQ~~ that has current ODEQ accreditations for the matrix, method, and analyte of the specific analysis being performed unless prior approval is obtained from PSTD.

(c) The consultant or tankowner may put excavated backfill back into the tankpit while waiting for sampling results, but if the backfill needs to be re-excavated and replaced with clean backfill, the re-excavation is not a reimbursable expense.

(d) After reviewing analytical results, PSTD will determine if concentrations of Chemicals of Concern are at levels that pose a threat to human health, safety and/or the environment, and should be removed. This decision will be based upon analytical levels and specific site conditions such as, but not limited to, lithology of the tankpit walls and surrounding native soils, gradient and direction of groundwater flow, and potential receptor exposure to Chemicals of Concern.

(e) Contaminated backfill and tankpit water that poses a threat to human health and/or the environment as determined by PSTD must be removed from the site to a proper disposal site and replaced by clean backfill, or may be remediated above grade to concentrations below action levels or ORBCA-related ~~cleanup~~ risk levels.

(f) Expenses incurred in the removal and disposal (but not re-excavation, see (c) above) of contaminated backfill and tankpit water may be reimbursable by the Fund only with written or documented verbal pre-approval (i.e., confirmed by email) from PSTD Technical staff. Reimbursement of eligible backfill disposal costs can only be paid when associated with an active, confirmed release case.

(g) Reimbursable backfill expenses identified in Section (f) above do not apply to new tank installations. If existing tanks are removed and replaced with new tanks, in order to ensure the efficacy of the cathodic protection, old backfill must be removed and new backfill must be placed in the tankpit. If the backfill is contaminated to the degree that it must be taken to a landfill, backfill removal and disposal costs are not reimbursable expenses.

(h) No soil, backfill material, or groundwater is to be removed from the site without prior PSTD approval and proper laboratory characterization unless otherwise directed by PSTD.

PART 5. CORRECTIVE ACTION REQUIREMENTS

165:29-3-73. Initial response

Upon confirmation of a release or after a release from a petroleum storage tank system is identified in any other manner, the owner or operator must perform the following initial response actions within 24 hours of a release:

- (1) Report the release to the PSTD either by telephone, ~~or~~ [or](#) electronic mail.
- (2) Take and document immediate action to prevent any further release of the regulated substance into the environment.
- (3) Identify any fire, explosion, and vapor hazards and mitigate them immediately.

165:29-3-76. Tier 1A ORBCA

(a) Unless otherwise directed by the PSTD, the owner or operator must compile information in order to assess the site using the Risk-Based Corrective Action (RBCA) process described in the ORBCA Guidance Document. (The ORBCA Guidance Document is available on the Commission website and at the offices of the Petroleum Storage Tank Division of the Oklahoma Corporation Commission.) The RBCA process must be implemented with a three (3) tiered approach that must involve an increase in the level of data collection and analysis from one tier to the next. Some conservative default parameters under the Initial Site Characterization Tier 1A process must be replaced with more site-specific parameters under the Tier 2 and Tier 3 process. PSTD will review the results and recommendations at the completion of the Tier 1A analysis and decide if a more site-specific tiered analysis is required by initiating a Tier 2 or Tier 3 process, or whether remedial action should be performed as provided for in this Subchapter.

(b) PSTD will only accept and review reports, worksheets, checklists, closure reports or other relevant documents which incorporate the RBCA process, or any other acceptable risk analysis, from a Commission Licensed Environmental Consultant.

(c) The RBCA Tier 1A process is as follows:

- (1) Tier 1A: Non-site-specific risk-based screening method used to determine corrective action goals using limited site-specific data.

(A) Tier 1A establishes conservative ~~cleanup~~[risk](#) goals called modified Risk-Based Screening Levels (RBSLs). Only the Fate and Transport Parameters cited in the ORBCA Guidance Document may be replaced by site-specific information obtained through site investigation and assessment. Justification must be provided when changes in any of the

default Fate and Transport Parameters are indicated. The default Exposure Factors cannot be modified, nor can degradation rates be used under a Tier 1A evaluation. This evaluation must be performed using the models cited in Appendix C of the ORBCA Guidance Document. The modified RBSLs take into consideration regional characteristics, aesthetic criteria, and other appropriate standards such as Maximum Contaminant Levels (MCLs) for water. Tier 1A modified RBSLs are derived from standard exposure scenarios using current Reasonable Maximum Exposure (RME) toxicological parameters and conservative contaminant migration models. RBSL values are determined by the PSTD using one (1) in one million (1,000,000) as a Target Risk Limit for carcinogens and a Hazard Quotient (HQ) not greater than one (1.0) as a Target Risk Limit for non-carcinogens. One (1) in ten thousand (10,000) is the acceptable Target Risk Limit for carcinogens for future potential receptors.

(B) The most likely Point of Exposure (POE) for current and potential future beneficial use of fresh groundwater should be determined. The concentration at this Point of Exposure for each Chemical of Concern (COC) must not exceed the Target Risk Limits cited in this Section.

(C) Unless otherwise directed by PSTD under Tier 1A the owner or operator must drill and install a minimum of four (4) two-inch (2") diameter monitoring wells outside of the UST pit or AST containment or product piping trench excavation zones. These wells must be located as follows:

- (i) One (1) well must be installed in an apparent upgradient location to any known potential source at the site on or as close to the release as possible.
 - (ii) One (1) well must be installed in a location most likely to be contaminated.
 - (iii) One (1) well must be installed in a location that will allow the determination of an accurate groundwater gradient.
 - (iv) One (1) well must be installed in the direction of the nearest probable Point of Exposure either at the nearest property line or fifty feet (50') from the source of contamination, whichever is closer, or at another location as determined by PSTD. This well will be the Point of Compliance (POC) well for the Tier 1A evaluation unless there is a Point of Exposure nearer to the source of contamination, in which case the Point of Exposure will also become the Point of Compliance. The concentration for each Chemical of Concern in the Point of Compliance well should not exceed the Tier 1A standards as calculated using the ORBCA Guidance Document. If a drinking water supply well has been identified within 330 feet of the site, groundwater MtBE must be tested at the Point of Compliance. 0.020 mg/L will be considered the level of concern for MtBE and may require further assessment and corrective action.
- (2) Tier 1A: Risk-Based Screening Level corrective action goals developed using limited site-specific data.
- (A) This evaluation must be performed using the same models as those which are cited in Appendix C of the Guidance Document.
 - (B) Only the Fate and Transport Parameters cited in the ORBCA Guidance Document may be replaced by site-specific information obtained through site investigation and assessment. Justification must be provided when changes in any of the Tier 1A default Fate and Transport Parameters are indicated. The Tier 1A default Exposure Factors cannot be modified, nor can degradation rates be used under a Tier 1A evaluation.

- (3) Within forty-five (45) days of release confirmation, or according to a schedule established by PSTD, the owner or operator must submit the information required in the Tier 1A evaluation as a report. This report must be submitted in the online format established by PSTD.
- (d) PSTD may re-evaluate a Tier 1A analysis of a site, for the purpose of closure, on a case-by-case basis.

165:29-3-80. Remedial Action Plan

- (a) At any point after reviewing the information submitted, PSTD may require additional information or a Remedial Action Plan for contaminated soils and groundwater. If a plan is required, it must be submitted in the online format specified by PSTD.
- (b) PSTD will approve a Remedial Action Plan only after the Licensed Environmental Consultant ensures that implementation of the plan will adequately protect human health, safety, and the environment as determined by using the process outlined in the ORBCA Guidance Document.
- (c) As directed by PSTD, the owner or operator must implement the Remedial Action Plan, including any modifications to the plan made by PSTD. Implementation for the purposes of this Chapter means that the Remedial Action Plan approved by PSTD is fully operational and is performing the task for which it was designed.
- (d) The owner or operator will be required to perform remediation and compliance monitoring as directed by PSTD.
- (e) The owner or operator may, with verbal pre-approval documented by email of PSTD staff, begin ~~cleanup~~corrective actions of soil and groundwater before the Remedial Action Plan is approved, provided that the owner or operator:
 - (1) Notify PSTD of the intention to begin ~~cleanup~~corrective actions at least seven (7) days prior to initiating any ~~cleanup~~fieldwork action, unless it is an emergency.
 - (2) Comply with any conditions imposed by PSTD, including halting ~~cleanup~~corrective actions or mitigating adverse consequences from ~~cleanup~~remediation activities.
 - (3) Incorporate these self-initiated ~~cleanup~~corrective action measures in the Remedial Action Plan or closure by risk assessment that is submitted to PSTD for approval.

165:29-3-81. Property owners affected by releases; notice

- (a) Upon confirmation that soil and/or groundwater contamination is above action levels, owners or operators must, at a minimum, notify adjacent or abutting property owners that have been, or may be impacted by the release. This notice should be made just after delineation of the release to Tier 2 ~~clean-up~~risk levels or prior to a case closure based on Tier 1A modified RBSL's. The notice, unless otherwise directed by the PSTD, must include at a minimum:
 - (1) The origin and extent of the release; impacted party, upon written request to owner/operator may receive reports;
 - (2) The nature of the substance(s) released;
 - (3) The name, address and telephone number of the owner or operator or his or her designee who may be contacted for more information about the release;
 - (4) The phone number and name of the Project Environmental Analyst at the PSTD whom the property owner can contact for additional information.
 - (5) If an adjacent or abutting property owner that has been or may be impacted by a release requests, in writing, copies of all reports, it is the responsibility of the owner/operator to assure past and future reports are delivered to the requesting property owner.

(b) For each confirmed release that requires remediation or closure by a risk assessment or Risk-Based Corrective Action, the owner or operator must notify property owners that have been or may be impacted by the release and provide:

- (1) The origin and extent of the release;
- (2) The nature of the substance(s) released;
- (3) A description of any planned remedial action or closure based upon a risk assessment of the release;
- (4) The name, address and telephone number of the owner or operator or his or her designee and of the PSTD Project Environmental Analyst working on the case who may be contacted for more information about the release, including any planned response action; and
- (5) A statement that additional information about the release, including any planned response action, is on file with the PSTD and available for public review.

(c) The notices required by this Section must be given by certified mail/return receipt requested. Copies of the return receipts must be included in the Public Participation Report submitted to the PSTD.

(d) The PSTD must ensure that any and all information concerning the release is made available to the public for review upon request.

(e) Before approving a remediation plan or closure based upon risk assessment, the PSTD may hold a public meeting to consider comments on the proposed remediation plan or closure if there is sufficient public interest, or for any other reasons. If no comments have been received within thirty (30) days of the receipt date of the certified mail notice letters required by paragraph (c) of this Section, then remediation or closure activities may commence. Any public comments related to the proposed remediation or case closure must be submitted in writing to the OCC to the attention of the PSTD Project Environmental Analyst working on this case, whose name and address will be on the notice letter.

(f) The notice required by this Section must also be given;

- (1) after implementation of an approved Remedial Action Plan that does not achieve the ~~cleanup~~ risk levels established in the plan, and
- (2) when termination of the plan is subsequently approved by the PSTD.

165:29-3-82. Closure of a case

(a) Closure occurs when PSTD has determined that the appropriate ~~cleanup~~ risk levels have been achieved for both BTEX and TPH and monitored as remaining below the ~~cleanup~~ risk level for a period of time as directed by PSTD, or when PSTD has determined the case is eligible for closure under Risk-Based Corrective Action.

(b) Upon approval of the request for case closure or as directed by PSTD, the owner or operator must submit a final closure report on a form specified by PSTD and certified by the Licensed Environmental Consultant which provides evidence of proper decommissioning of equipment and corrective action materials.

(c) All residual waste soil and/or fluid drums generated during case closure activities, or that remain on-site from prior case investigation activities, must be disposed of as part of case closure work and evidence of disposal of such drums documented in the final closure report. The final closure report will not be approved until all residual wastes have been disposed of.

165:29-3-83. Laboratory analysis

- (a) All samples required to be collected and analyzed pursuant to this Chapter must be analyzed by a ~~DEQ-certified~~ laboratory that has current ODEQ accreditations for the matrix, method, and analyte of the specific analysis being performed unless prior approval is obtained by PSTD.
- (b) The Total Petroleum Hydrocarbon (TPH) Lab Methodology EPA 418.1 will not be accepted for Part 5 of this Subchapter.
- (c) When air sampling is required inside any structure or vapor monitoring well, the sampling and the method(s) used must be pre-approved in writing by PSTD.

PART 7. LICENSING PROCEDURES FOR ENVIRONMENTAL CONSULTANTS

165:29-3-90. Licensing for Environmental Consultants involved with closures and/or corrective action of releases from underground or aboveground storage tanks

- (a) Any individual seeking a license as an Environmental Consultant involved with closures, and/or corrective action of releases from either underground or aboveground storage tank sites must complete an application form prepared by PSTD. The application form requires information regarding education, experience, knowledge of applicable state and federal regulations, industry standards and practices and references.
- (b) All applicants must qualify in the following manner:
 - (1) Satisfy requirements of the Occupational Safety and Health Administration (OSHA) 29 CFR 1910.120 (HAZWOPER) forty (40) hour course with eight (8) hour annual updates and the eight (8) hour supervisor course; must provide evidence of the successful completion of a PSTD approved Risk-Based Corrective Action course, seminar or school. At a minimum this course must include sixteen (16) hours of risk assessment/risk analysis and fate and transport of chemicals in the environment; eight (8) hours of which must be hands-on computer training with appropriate software; and
 - (2) Have seven (7) years' environmental experience with at least two (2) years' of corrective action experience at regulated petroleum storage tank facilities and pass an examination, which must be taken no more frequently than once every six (6) months, authorized by the State of Oklahoma, which demonstrates knowledge of reference materials published by EPA:NWWA (Technical Enforcement Guidance Document-TEGD) and all applicable federal, state, and local regulations; or
 - (3) Have a four (4) year degree from an accredited college or university recognized by the state in Geology, Hydrology, Environmental Science, Environmental Engineering, Petroleum Engineering, Civil Engineering, Geologic Engineering or an equivalent engineering degree and at least four (4) or more years of environmental experience with at least two (2) years' experience at regulated petroleum storage tank facilities, and pass an examination approved by the PSTD. The examination will test an applicant's knowledge of industry standards, reference materials, laws and regulations, and may be taken no more frequently than once every six (6) months.
- (c) Licensed Environmental Consultants are required to pay fees for applications, examinations, and certifications prior to examination and license issuance as set forth in OAC 165:5.
- (d) Licensed Environmental Consultants must provide proof of attending (online or in-class) eight (8) hours of PSTD approved continuing professional education courses, classes, seminars or conferences to PSTD every year. Licensees may request to rollover a maximum of eight (8) credit hours from the current year to satisfy the following year's continuing education requirements. Approval of any rollover hours will be at the discretion of PSTD after evaluating the class,

conference, course, or seminar. Licensees must also provide proof of attending eight (8) hours of HAZWOPER Refresher class updates every year.

(e) Sampling, sampling at tank closures, investigations, and remediation or any other activities directed by PSTD must be under the supervision of a Licensed Environmental Consultant. All work requiring supervision by Licensed Environmental Consultants must contain a verification statement signed by the consultant in supervisory control.

(f) Licensed Environmental Consultants must supervise and/or perform work only in the areas in which they are educated and/or experienced.