

4.8 Spill and Leak Response Procedures

Waste Control

Description: Spill and leak response procedures address the management of spills and leaks that may occur at the construction site. The objective of the spill and leak response procedures is to minimize the discharge of pollutants from unplanned releases of chemicals, fuel, motor vehicle fluids, hazardous materials or wastes through appropriate recognition and response procedures.

<p style="text-align: center;"><u>KEY CONSIDERATIONS</u></p> <p>DESIGN CRITERIA:</p> <ul style="list-style-type: none"> ● Develop procedures based on the Material Safety and Data Sheets for substances onsite ● Maintain spill kits for petroleum products and other chemicals frequently onsite ● Post emergency contact numbers ● Designate a spill response coordinator ● Train employees ● Review reporting requirements for onsite chemicals <p>LIMITATIONS:</p> <ul style="list-style-type: none"> ● Procedures susceptible to being forgotten because they are seldom or never used ● Larger spills and spills of extremely hazardous materials require special equipment and should be handled by professionals ● Not applicable to long-term contamination remediation <p>MAINTENANCE REQUIREMENTS:</p> <ul style="list-style-type: none"> ● Review procedures regularly ● Verify spill kits, MSDSs, and emergency contacts are readily available ● Train new employees and regularly re-train all employees 	<p style="text-align: center;"><u>APPLICATIONS</u></p> <p>Perimeter Control</p> <p>Slope Protection</p> <p>Sediment Barrier</p> <p>Channel Protection</p> <p>Temporary Stabilization</p> <p>Final Stabilization</p> <div style="border: 1px solid black; padding: 2px; text-align: center;">Waste Management</div> <p>Housekeeping Practices</p>
<p style="text-align: center;"><u>TARGETED POLLUTANTS</u></p> <ul style="list-style-type: none"> ○ Sediment ● Nutrients & Toxic Materials ● Oil & Grease ○ Floatable Materials ● Other Construction Wastes 	<p style="text-align: center;"><u>IMPLEMENTATION CONSIDERATIONS</u></p> <ul style="list-style-type: none"> ● Capital Costs ● Maintenance ● Training ○ Suitability for Slopes > 5% <p>Other Considerations:</p> <ul style="list-style-type: none"> ● <i>OSHA, EPA and TCEQ regulations</i>

4.8.1 Primary Use

Spill and leak procedures are used to minimize the impact of accidental releases on surface water. Pollutants that are of concern for spill and leaks include chemicals, hazardous materials, fuel, motor vehicle fluids, washout waters, and wastes. Spill and leak response is a secondary control. Proper procedures for managing these pollutants should be the primary control and are the best way to prevent the need for spill and leak response.

4.8.2 Applications

Spill and leak response procedures are applicable on all construction sites where chemicals, hazardous materials, fuels, etc. are stored or used. They are most important when the construction site is adjacent or near to a floodplain, wetland, stream, or other waters.

4.8.3 Design Criteria

General

- An effective spill and leak response depends on proper recognition and response practices by construction workers and supervisors. Key elements are education and training.
- Records of releases that exceed the Reportable Quantity (RQ) for oil and hazardous substances should be maintained in accordance with the Federal and State regulations.
- Emergency contact information and spill response procedures shall be posted in a readily available area for access by all employees and subcontractors.
- Spill containment kits should be maintained for petroleum products and other chemicals that are regularly onsite. Materials in kits should be based on containment guidelines in the Material Safety and Data Sheets (MSDSs) for the substance most frequently onsite.
- Spill kits are intended for response to small spills, typically less than 5 gallons, of substances that are not extremely hazardous.
- Significant spills or other releases warrant immediate response by trained professionals.
- Suspected job-site contamination should be immediately reported to regulatory authorities and protective actions taken.

Coordinator

- The contractor should be required to designate a site superintendent, foreman, safety officer, or other senior person who is onsite daily to be the Spill and Leak Response Coordinator.
- The coordinator must have knowledge of and be trained in correct spill and leak response procedures.
- The coordinator shall be responsible for implementing the spill and leak procedures and training all employees and sub-contractors on the site-specific spill and leak procedures. The training should include their responsibility to immediately notify the coordinator if a spill or leak occurs.

Spill Response

- Upon discovery of a spill, employees and subcontractors shall implement the following procedures:
 - Immediately stop work and clear the area by moving upwind of the spill.
 - Remove all ignition sources.
 - Notify the Spill and Leak Response Coordinator.
 - If there is an immediate danger to health or life, contact 911.

- The Spill and Leak Response Coordinator shall perform the following when the spill is not immediately dangerous to health and safety:
 - Consult the MSDS for safety and response procedures.
 - If it can be done safely, use onsite spill kits and soil to contain the spill.
 - Notify a hazardous response company to remove and properly dispose of the spilled material and the contaminated containment materials.

Spill Reporting

- The Spill and Leak Response Coordinator is responsible for notifying authorities of spills and leaks. Notification requirements are based on Reportable Quantities as established by the type or material, quantity and location (onto land or into water in the state) of the release.
- Reportable Quantities (RQ) in the State of Texas are established by the TCEQ in Texas Administrative Code Title 30, Chapter 327 (30 TAC 327) Spill Prevention and Control.
- The Texas RQ for petroleum products and used oil is 25 gallons released onto land or any amount that causes sheen on water.
- Reportable Quantities for all other substances are listed in 30 TAC 327.4, which references the EPA List of Lists (EPA 550-B-01-003) available at: <http://www.epa.gov/ceppo/pubs/title3.pdf>
- The Spill and Leak Response Coordinator shall notify the following:
 - The municipality that operates the local Municipal Separate Storm Sewer System (MS4) if a spill or leak enters public rights-of-way or any type of drainage way or drainage infrastructure within the jurisdiction of the municipality.
 - State of Texas Spill Report Hotline at 1-800-832-8224 if the spill or leak exceeds the RQ; and during regular business hours, the TCEQ Dallas/Fort Worth Regional Office at 817-588-5800.
 - National Spill Response Center at 1-800-424-8802 if the spill or leak exceeds the RQ.

4.8.4 Design Guidance and Specifications

National guidance for response procedures are established by the Environmental Protection Agency (EPA) in the Code of Federal Regulations (CFR). Specific sections addressing spills are governed by:

- 40 CFR Part 68 Chemical Accident Prevention Provisions.
- 40 CFR Part 302 Designation, Reportable Quantities (RQ) and Notification.
- 40 CFR Part 355 Emergency Planning and Notification.

Guidance for emergency response procedures in the State of Texas are established by the Texas Commission on Environmental Quality (TCEQ) in the Texas Administrative Code Title 30, Chapter 327, Spill Prevention and Control.

No specification for construction of this item is currently available in the Standard Specifications for Public Works Construction – North Central Texas Council of Governments.

4.8.5 Inspection and Maintenance Requirements

Spill and leak response measures should be inspected regularly (at least as often as required by the TPDES Construction General Permit). Verify that spill containment materials are available for small spills. Also verify that emergency contact information is posted. These phone numbers and Material Safety and Data Sheets should be in a location that is readily accessible to workers.

If procedures are lacking, reinforce requirements by re-training employees.