



Targeted Constituents

● Significant Benefit		▸ Partial Benefit		○ Low or Unknown Benefit	
○ Sediment	○ Heavy Metals	○ Floatable Materials	○ Oxygen Demanding Substances		
○ Nutrients	▸ Toxic Materials	▸ Oil & Grease	○ Bacteria & Viruses	○ Construction Wastes	

Implementation Requirements

● High		▸ Medium		○ Low	
○ Capital Costs	▸ O & M Costs	○ Maintenance	○ Suitability for Slopes >5%	▸ Training	

Description

Prevent or reduce the discharge of pollutants to stormwater from leaks and spills by reducing the chance for spills, stopping the source of spills, containing and cleaning up spills, properly disposing of spill materials, and training employees. This management practice is likely to create a partial reduction in toxic materials and oil and grease.

This best management practice covers only spill prevention and control. However, CP-05: Material Delivery, Storage, and Use also contains useful information, particularly on spill prevention. For information on wastes, see the waste management BMPs in this section.

Spill prevention and control applies to chemicals and hazardous substances including, but not limited to:

- Soil stabilizers
- Palliatives
- Herbicides
- Growth inhibitors
- Fertilizers
- Deicing/anti-icing chemicals
- Fuels
- Lubricants
- Other Petroleum distillates

This management practice is likely to create a partial reduction in the impacts caused by toxic materials and oil and grease.

Approach

The following steps will help reduce the stormwater impacts of leaks and spills:

Define “Significant Spill”

- Different materials pollute in different amounts. Make sure that each employee knows what a “significant spill” is for each material they use, and what is the appropriate response for “significant” and “insignificant” spills. A significant spill should be defined after review of the Materials Safety Data Sheet or other descriptive documentation that presents the contents and proper handling procedures.

General Measures

- Hazardous materials and wastes should be stored in covered containers and protected from vandalism.
- Place a stockpile of spill cleanup materials where it will be readily accessible.
- Train employees in spill prevention and cleanup procedures for the site.
- Educate employees and subcontractors on potential dangers to humans and the environment from spills and leaks.
- Hold regular meetings to discuss and reinforce appropriate disposal procedures (incorporate into regular safety meetings).
- Establish a continuing education program to indoctrinate new employees.
- Designate a foreman or supervisor to oversee and enforce proper spill prevention and control measures.

Cleanup

- Clean up leaks and spills immediately.
- On paved surfaces, clean up spills with as little water as possible. Use a rag for small spills, a damp mop for general cleanup, and absorbent material for larger spills. If the spilled material is hazardous, then the used cleanup materials are also hazardous and must be sent to either a certified laundry (rags) or disposed of as hazardous waste.
- Never hose down or bury dry material spills. Clean up as much of the material as possible and dispose of properly. See the waste management BMPs in this section for specific information.
- Minor Spills

- Minor spills typically involve small quantities of oil, gasoline, paint, etc. which can be controlled by the first responder at the discovery of the spill.
- Use absorbent materials on small spills rather than hosing down or burying the spill.
- Remove the absorbent materials promptly and dispose of properly.
- The practice commonly followed for a minor spill is:
 1. Contain the spread of the spill.
 2. Recover spilled materials.
 3. Clean the contaminated area and/or properly dispose of contaminated materials.
- **Semi-Significant Spills**
 - Semi-significant spills still can be controlled by the first responder along with the aid of other personnel such as laborers and the foreman, etc. This response may require the cessation of all other activities.
 - Clean up spills immediately:
 1. Notify the project foreman immediately. The foreman shall notify the Engineer or Safety Manager.
 2. Determine if spill response construction personnel are qualified to perform the cleanup in a safe manner. Alert additional trained personnel if necessary including a Haz-Mat team or dial 911 for local authorities.
 3. Contain spread of the spill.
 4. If the spill occurs on paved or impermeable surfaces, clean up using "dry" methods (absorbent materials, cat litter and/or rags). Contain the spill by encircling with absorbent materials and do not let the spill spread widely.
 5. If the spill occurs in dirt areas, immediately contain the spill by constructing an earthen dike. Dig up and properly dispose of contaminated soil.
 6. If the spill occurs during rain, cover spill with tarps or other material to prevent contaminating runoff.
- **Significant/Hazardous Spills**
 - For significant or hazardous spills that cannot be controlled by personnel in the immediate vicinity, the following steps shall be taken:
 1. Notify the Engineer immediately and follow up with a written report.

2. Notify the local emergency response by dialing 911. In addition to 911, the contractor will notify the proper county officials. It is the contractor's responsibility to have all emergency phone numbers at the construction site.
3. For spills of state reportable quantities or into a waterbody or adjoining shoreline, the contractor shall notify the TDEC general hotline – environmental assistance at 1-888-891-8332 (TDEC).
4. For spills of federal reportable quantities or into a waterbody or adjoining shoreline, the contractor shall notify the National Response Center at (800) 424-8802.
5. Notification should first be made by telephone and followed up with a written report.
6. The services of a spills contractor or a Haz-Mat team shall be obtained immediately. Construction personnel should not attempt to clean up until the appropriate and qualified staff has arrived at the job site.
7. Other agencies which may need to be consulted include, but are not limited to, the Fire Department, the Public Works Department, the City/County Police Department, OSHA, etc.

See CP-13 and 14 for details about spill prevention and control while maintaining or fueling vehicles and equipment.

Requirements

- Costs (Capital, O&M)
 - Prevention of leaks and spills is inexpensive. Treatment and/or disposal of contaminated soil or water can be quite expensive.

Maintenance

- Keep ample supplies of spill control and cleanup materials on-site, near storage, unloading, and maintenance areas.
- Update your spill prevention and control plan and stock cleanup materials as changes occur in the types of chemicals on-site.

Limitations

- Use only a reputable, licensed spill clean up company to clean up large spills.
- Procedures and practices presented in this BMP are general. Contractor shall identify appropriate practices for the specific materials used or stored on site.
- If necessary, use a private spill cleanup company.

Primary References

California Storm Water Best Management Practice Handbooks, Construction and Industrial Handbooks, CDM et.al. for the California SWQTF, 1993.

Caltrans Storm Water Quality Handbooks, CDM et.al. for the California Department of Transportation, 1997.

**Subordinate
References**

Blueprint for a Clean Bay-Construction-Related Industries: Best Management Practices for Storm Water Pollution Prevention; Santa Clara Valley Nonpoint Source Pollution Control Program, 1992.

Storm Water Management for Construction Activities: Developing Pollution Prevention Plans and Best Management Practices, EPA 832-R-92005; USEPA, April 1992.