

This bulletin is published monthly by the Storm Water Compliance Review Task Force to support the Caltrans maintenance staff in its efforts to achieve and maintain compliance with storm water pollution prevention regulatory requirements.

Above Ground Storage Tank Leak and Spill Control

Above ground storage tanks are used at Maintenance facilities to store fuel, oil, antifreeze, deicing agents and asphalt emulsion. These materials can pose potential threats to water quality if spilled or mixed with storm water runoff. This bulletin reviews the Best Management Practices (BMPs) for preventing above ground storage tank leaks and spills, and an overview of management practices should spills or leaks occur.

Inspection

Regular inspection of above ground tank facilities should include the following:

- Check storage tanks, secondary containment, spill containment, and associated valves and piping for external corrosion, structural failure, or loose connections. Make repairs as needed.
- Prior to releasing rain water from secondary/spill containment, inspect the water for contamination. If there is evidence of spilled or leaked material, or captured rain water in the spill containment exhibits a surface sheen, contact your District Storm Water Coordinator or District Hazmat Manager for appropriate actions to be taken.
- Make sure the drain valve or plug is properly secured to contain any future leaks or spills.



Spill containment berm with drain plug properly secured.

Spills

Be prepared to respond in the event of a leak or spill from an above ground tank:

- Maintain an appropriate spill kit near each above ground tank.
- Replenish spill kit supplies as they are used.
- If the type of material being stored changes, replace spill kit contents with supplies appropriate for the new material.

If a Larger Spill or Tank Failure Occurs:

- Contact your supervisor and District Hazmat Manager.
- Only attempt containment or cleanup measures if it is safe to do so by following Caltrans

compliance procedures. Refer to your Hazardous Materials Business Plan, District Spill Contingency Plan, and the California Code of Regulations, Title 8, Chapter 4, General Industrial Safety Orders (GISO) 5192 for more information.

- Evacuate all non-essential personnel from the immediate area. If you feel you can stop the release safely and the required actions are within your capabilities and training, wear your personal protective equipment, and attempt to contain and clean-up the spill to prevent spreading.
- Protect downstream inlets and watercourses, if it is safe to do so.



Double-walled above ground storage tank with spill containment curb, spill kit with container for used absorbent, and guard posts to protect tank from possible vehicular damage.

For More Information

The following sources contain additional information about the topics reviewed in this bulletin:

- For cleaning spilled materials, particularly hazardous materials, follow procedures from the product MSDS (Material Safety Data Sheet) or the *North American Emergency Response Guidebook* (Federal DOT document).
- For emergency procedures related to large spills, review the *District Hazardous Materials Spill Contingency Plan*.
- For facility-specific procedures related to spills, refer to the *Spill Prevention Control and Countermeasures (SPCC) Plan*, Title 40, Code of Federal Regulation, part 112 or your *Hazardous Materials Business Plan*.
- For storm water BMPs, consult T9d, **Above Ground Tank Leak and Spill Control**, in the Caltrans Storm Water Quality Handbooks, Maintenance Staff Guide.
- For vehicle and equipment fueling BMPs, review the August 1998 Maintenance Storm Water Pollution Prevention Bulletin available on the website: <http://onramp.dot.ca.gov/hq/maint/orside/water/watqual.htm>
- The *Maintenance Staff Guide* and earlier issues of the Bulletin are available on the websites listed below.

Additional information is available in the Caltrans Storm Water Quality Handbooks - Maintenance Staff Guide, or from your District Maintenance Storm Water Coordinator. Questions or comments may be directed to Jennifer Malcolm, HQ Maintenance Storm Water Coordinator, (916) 653-0086, Roger Churchwell, HQ Environmental Engineering, (916) 653-3653

Visit our Caltrans storm water intranet website at: [HTTP://onramp.dot.ca.gov/hq/maint/orside/water/watqual.htm](http://onramp.dot.ca.gov/hq/maint/orside/water/watqual.htm) for the latest storm water bulletins, training information, list of storm water coordinators, inspection forms, and Maintenance Staff Guide.

The storm water bulletins are also available on the Caltrans Environmental website at: [HTTP://www.dot.ca.gov/hq/Environmental/stormwater/index.htm](http://www.dot.ca.gov/hq/Environmental/stormwater/index.htm)