



BMP FACTSHEET OVERVIEW

Stormwater pollution can come from many sources. When it rains or snows, the pollutants on impervious surfaces or hard surfaces are picked up by stormwater runoff and discharge to storm drains and lead directly into local streams without being treated to remove pollutants. Pollutants can consist of litter, oil, chemicals, bacteria, and sediment. These pollutants can be found on the ground as a result of everyday activities like cleaning and maintenance of vehicles and equipment, pressure washing, landscaping activities, and direct dumping. In addition to being harmful to water bodies, it is illegal to dump or pour anything except clean water down a storm drain. Good housekeeping practices and on-site pollution control are some of the most efficient methods to preventing water pollution. Prevention practices are usually easy and inexpensive.

All facilities should uphold proper maintenance practices consisting of:

- **Good housekeeping:** It is essential that the entire facility be kept clean, orderly and free of unnecessary items. Maintain all materials off the ground, dry, and protected from stormwater. Keep items “high and dry.” Sweep up any spilled solid products immediately and dispose of the material appropriately.
- **Address problems promptly:** Make repairs to tanks and equipment as soon as problems are noted.
- **Scheduled Maintenance:** Scheduled maintenance should be performed on ASTs, equipment, and vehicles to include fittings, valves and pumps. Any leaking or dripping should be addressed in a timely manner.
- **Safety Data Sheet (SDS) Maintenance:** Maintain updated SDS for each chemical stored nearby and accessible at all times.
- **Detailed maintenance records** should be kept to ensure proper upkeep on equipment and available for audits/inspections.
- **Spill Preparedness and Response:** Spill response equipment (spill kits) should be accessible at all times and in good working condition. Spill kit should be co-located with sources of spills i.e. fueling activities, storage or hazardous materials, maintenance areas, etc. Make sure a copy of Ft. Belvoir’s spill response procedures is easily accessible. Any used items from the kit must be immediately be replenished.



- **Safety:** Fire extinguishers must be kept pressurized and should be shaken every month. All other safety equipment must be in good working order.
- **Security:** Any holes in fence, locks on gates and burned out light bulbs should be repaired or replaced as soon as the deficiency is noted.
- **Secondary containment:** Liquid hazardous materials can be a threat to soil, groundwater, and surface water. Substances should be stored so that if a spill or leak occurs, the material is contained.

Containment capacity should be able to capture 110% of the stored liquid material.



GOOD HOUSEKEEPING

General Good Housekeeping

- Keep workspaces orderly. Sweep, vacuum, and mop floors rather than hosing them down to prevent harmful contaminants from entering storm drains.
- Stencil storm drains at the facility for employee awareness
- Routinely inspect containers and tanks for leaks and signs of corrosion/damage.
- Clean up any spills or leaks immediately.
- Use things like drip pans to prevent future spills.
- Make sure proper spill procedures are posted and easily available. Be sure to have fully stocked, easily accessible, and labeled spill kits on site.
- Be conscious of any detergents you are using. Even the least toxic chemicals can be harmful if used incorrectly. Exercise caution when handling any type of chemical and reduce chemical use whenever possible.
- Keep all materials organized. Have designated areas for each type of material.
- Materials such as oil, fuels, and chemicals must be kept in properly labeled containers that have **secondary containment**.
- Safety Data Sheets for each chemical should be kept nearby and easily accessible at all times.
- Make sure all containers are labeled properly, lids are secure, and have proper secondary containment.
- Ensure empty containers and drums are labeled “EMPTY” when container is empty.
- Hazardous materials and waste materials should be kept in **sealed and labeled** containers and away from any storm drains.
- Make sure waste materials and trash are disposed of properly and in a timely manner.
- Develop a material tracking system to keep track of material usage and locations of materials.
- Provide employees with storm water pollution prevention education and proper spill response training.
- Ensure dumpsters are closed when dumpster is not in use (adding and taking out trash). Look for leaks and holes in dumpster. Notify DPW Solid Waste Program Manager at (703)806-0061 for dumpster issues.





SPILL PREPAREDNESS & RESPONSE



SPILL RESPONSE PROCEDURES

In the event of a spill or leak follow the appropriate Spill Response posted at your facility or refer to Appendix B if the facility has a facility-specific SWPPP

- **Survey the incident** from a safe distance. Identify the source of release and the material being released.
- Call the Ft. Belvoir Fire Department if spills are greater than 5 gallons OR greater than 5 square feet. If ANY amount of leaked materials has entered a storm drain or waterway call the Ft. Belvoir Fire Department at (703)781-1800 and DPW Environmental Division at (703)806-3694.
- Provide the Safety Data Sheet of the spilled material to the spill response personnel.
- Fill out Spill Incident Report in your SWPPP.
- **REPORT ALL SPILLS TO DPW/ENV. DIV. AND THE FIRE DEPARTMENT!**

REPORT SPILLS TO DPW/ENV. DIV. BY:

- E-mailing your Spill Incident Report to zachary.d.witman.civ@army.mil.
- Calling (703) 806-3694



SECONDARY CONTAINMENT

Secondary containment: The purpose of secondary containment is to prevent hazardous materials like petroleum products, antifreeze, and solvents from flowing onto the ground or into the water in the event of a spill at any facility. Spill containment measures, including secondary containment are required by the Environmental Protection Agency (EPA) at outdoor storage facilities. Secondary containment for all HAZ-MAT waste and material must follow regulations from EPA 40 CFR 264.175(b). Secondary containment:



- Must be large, high and strong enough to hold contents of the largest tank plus 10% (110%) for local precipitation.
- Must be constructed or lined with material that will hold petroleum products and prevent them from seeping into the ground.
- The liner should be covered with sand or gravel to prevent ripping and to provide protection from the weather.
- Double walled aboveground storage tanks are not required to be located within a secondary containment area provided they have a high liquid level alarm, and a flow restrictor or automatic shut off device

Secondary Containment Inspections

Secondary containment structures must allow inspections of the tanks or containers, the timely detection of any leaks and recovery of any spillage, and the removal and proper disposal of any captured precipitation so that the minimum required capacity is maintained at all times.

- All secondary containment must be inspected immediately after a storm event.
- Inspection should consist of a visual inspection of the water to determine if any contamination from the materials being stored (i.e. oils, fuels, etc.) have leaked (sheen or other indicator is present)

- If there is no sign of contamination, the water may be discharged to a location where there is no concern for reaching state waters. Under 40 CFR 112.8, you must find a location with no direct charge point that would allow for direct infiltration or pump and dispose of the water into a sanitary system via indoor basin.

- If there is a sheen or other indicator of contamination within the secondary containment skim/absorb any oils present prior to disposing to the sanitary sewer. If you are unsure if it is acceptable to dump the water please use a conservative approach and give DPW/Environmental Division (Env. Div.) a call to provide further guidance.



ASTs stored indoors and outdoors must be managed such that no releases can reach drains, groundwater or surface waters. If there is a floor drain, it must be plugged unless it is connected to a holding tank, or approved in a discharge permit that the facility has obtained from the Virginia Department of Environmental Quality (VDEQ). Your facility-specific SWPPP should contain current documentation of any permits held.

Secondary Containment structures are also covered under the Master Spill Plan under AST Inspection Requirements. For questions and additional information, contact DPW / Env. Div. at (703) 806-3694