

OUTDOOR STORAGE AND HANDLING OF RAW MATERIALS AND WASTE BMP FACTSHEET 3

Rev. 04/2023



DESCRIPTION

Outdoor material storage and handling is used when indoor storage and handling is not feasible. Many facilities on Ft. Belvoir have designated outside facilities which store both raw materials and waste materials. It is important to follow proper procedures so that pollutants do not migrate by stormwater into our natural waterways. The goal of establishing outdoor procedures when handling material waste is to prevent spills and leaks by requiring facility owners to comply with various safeguard requirements including secondary containment, erosion and sediment controls, corrosion protection, overfill prevention, and leak detection.

Targeted Pollutants

Sediment	X
Nutrients	X
Trash	X
Metals	X
Bacteria	
Oil & Grease	X
Chemicals	
Salt	X

Objectives

Cover	X
Contain	X
Educate	X
Reduce/Minimize	X
Product Substitution	

GUIDELINES

- Store materials on a surface that prevents liquids from penetrating the surface and does not allow the liquid to seep into the ground.
- Protect materials stored outside from rainfall and wind dispersal. Materials should be stored indoors, if feasible.
- Ensure proper erosion and sediment control measures for sand, soil or other materials subject to erosion by water and wind.
- Containers must have proper labeling and secure lids.
- Follow good housekeeping practices – keep things orderly and in good working condition.

Outdoor Material Coverage

- Cover materials with a fixed roof or a temporary waterproof cover made of polyethylene or polypropylene.
- Keep covers in place at all times when work is not occurring.
- Make sure materials are protected from wind and rain and covers are secured.
- If the stockpiles (mulch, sand or other raw materials) are too large and cannot feasibly be covered and contained, implement erosion control practices at the perimeter of your site and at any storm drain to prevent erosion of the stockpiled material from moving off-site.

Outdoor Material Ground Placement

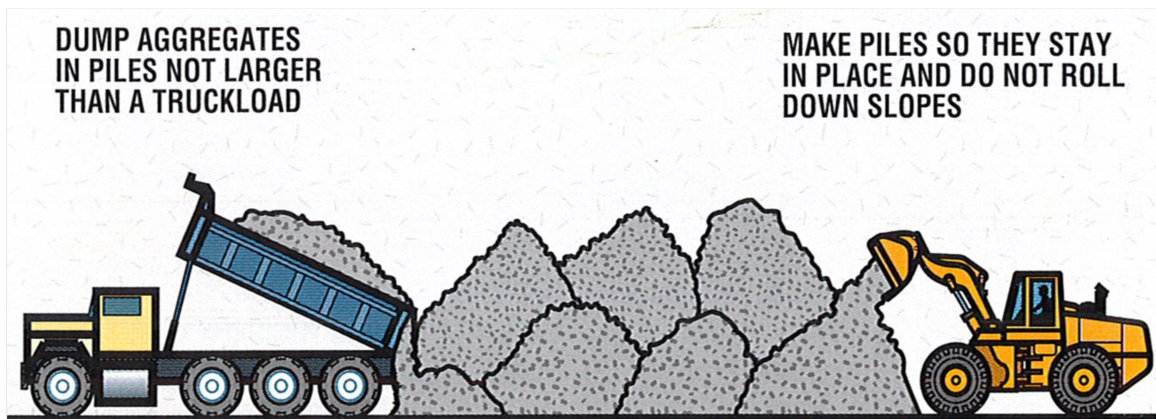
- Protect materials stored outside from stormwater run-on. Construct a berm around the perimeter to prevent the run-on of stormwater from adjacent areas as well as runoff of stormwater from the material.
- In the case of laydown yards, stabilize any large piles so materials do not become loose.
- Cover and contain stockpiles of raw materials to prevent stormwater from running into piles.
- Minimize pooling of water. Slope paved areas to minimize the pooling of water on the site, particularly with materials that may leach pollutants into stormwater, such as compost, logs and wood chips. A minimum slope of 1.5 percent is recommended. Collection and filtration will be required.
- In the case of salt storage, do not let salt come in contact with stormwater! Salt should be stored in a corrosive resistant, lined and covered container.

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MAINTENANCE/ GOOD HOUSEKEEPING

- Cover and contain the stockpiles of raw materials to prevent stormwater from running into the piles.
- Cover materials after each use to reduce exposure of materials to rain.
- Clean areas regularly to remove potential sources of pollutants.
- Restock emergency spill kit when depleted.
- Inspect the perimeter for signs of material moving off-site. This visual inspection is intended to be a routine walk-around and include the erosion and sediment measures implemented.
- Inspect machinery and trucks for leaks. Vehicles that are stored outdoors for long periods of time require drip pans. Clean out and remove drip pans off the ground when transfer has been completed.
- Repair leak-prone spots as soon as possible.
- At laydown yards, continue to stabilize any large piles so that materials do not become loose. Follow Virginia Erosion and Sediment Control Handbook for appropriate measures and installation methods.



SPILL RESPONSE PROCEDURES

In the event of a spill or leak, follow the appropriate Spill Response Procedures posted at your facility or refer to the BMP Factsheet Overview.

- **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 material has entered a storm drain or waterway call the Ft. Belvoir Fire Department at 703-781-1800 and DPW Environmental Division (Env. Div.) 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 REGARDLESS OF SIZE TO DPW/ENV. DIV.

REPORT SPILLS TO DPW/ENV. DIV. BY:

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