

WM-2 MATERIAL DELIVERY AND STORAGE

Refer to: ITD Standard Drawings P-1-D, P-5-A.



BMP Objectives

- Perimeter Control
- Slope Protection
- Borrow and Stockpiles
- Drainage Areas
- Sediment Trapping
- Stream Protection
- Temporary Stabilizing
- Permanent Stabilizing

Definition and Purpose

These are procedures and practices for use of construction material in a manner that minimizes or eliminates the discharge of these materials to the storm drain system or watercourses.

Appropriate Applications

This BMP applies to all construction projects. These procedures apply when the following materials are used or prepared on-site:

- Hazardous chemicals, such as acids, lime, glues, adhesives, paints, solvents, and curing compounds
- Soil stabilizers and binders
- Fertilizers
- Detergents
- Plaster
- Petroleum products such as fuel, oil, lubricants and grease
- Asphalt and concrete compounds
- Pesticides and herbicides
- Other materials that may be harmful to the environment

Limitations

- Space limitation may preclude indoor storage.
- Storage sheds must meet building and fire code requirements.

General Considerations

- Train employees and subcontractors on the proper material delivery and storage practices.
- Ensure all material storage areas are documented on SWPPP plan sheets or maps.
- Temporary storage areas shall be located away from vehicular traffic.
- Material Safety Data Sheets (MSDS) shall be left onsite and available to the Engineer upon request.

Material Storage Areas and Practices

- Liquids, petroleum products, and substances listed in 40 CFR Parts 110, 117, or 302 shall be stored in approved containers and drums and shall be placed in temporary containment facilities for storage.
- Throughout the rainy season, each temporary containment facility shall have a permanent cover and side wind protection or be covered during nonworking days and during rain events.
- A temporary containment facility shall provide for a spill containment volume able to contain 110 percent of the capacity of the largest container within its boundary.
- A temporary containment facility shall be impervious to the materials stored therein for a minimum contact time of 72 hours.
- A temporary containment facility shall be maintained free of accumulated rainwater and spills. In the event of spills or leaks, accumulated rainwater and spills shall be collected and placed into drums. These liquids shall be handled as a hazardous waste unless testing determines them to be non-hazardous.
- All collected liquids shall be sent to an approved disposal site.
- Sufficient separation shall be provided between stored containers to allow for spill cleanup and emergency response access.
- Incompatible materials, such as chlorine and ammonia, shall not be stored in the same temporary containment facility.
- Materials shall be stored in their original containers and the original product labels shall be maintained in place in a legible condition. Damaged or otherwise illegible labels shall be replaced immediately.
- Stockpiles shall be protected in accordance with WM-4 (Stockpile Management).
- The amount of material stored on-site shall be kept to a minimum.
- Proper storage instructions shall be posted at all times in an open and conspicuous location.
- Hazardous chemicals, drums, or bagged materials shall not be stored directly on the ground. These items shall be placed on a pallet and, when possible, under cover in secondary containment.
- An ample supply of appropriate spill cleanup material shall be kept near storage areas.

- WM-7 (Hazardous Waste Management) has additional information for storing of hazardous materials and wastes.

Material Delivery Practices

- An accurate, up-to-date inventory of material delivered and stored on-site shall be kept.
- Employees trained in emergency spill cleanup procedures shall be present when dangerous materials or liquid chemicals are unloaded.

Spill Clean Up

- Contain and clean up any spill immediately.
- If significant residual materials remain on the ground after construction is complete, properly remove and dispose any hazardous materials or contaminated soil.
- See WM-5 (Spill Prevention and Control), for spills of chemicals and/or hazardous materials.

Maintenance and Inspection

- Inspections shall be conducted as required by the NPDES permit or contract specifications.
- Storage areas shall be kept clean, well-organized, and equipped with ample cleanup supplies as appropriate for the materials being stored.
- Perimeter controls, containment structures, covers, and liners shall be repaired or replaced as needed to maintain proper function.