

## **1.21 BMP C153: Material Delivery, Storage and Containment**

### **1.21.1 Purpose**

Prevent, reduce, or eliminate the discharge of pollutants from material delivery and storage to the stormwater system or watercourses by minimizing the storage of hazardous materials onsite, storing materials in a designated area, and installing secondary containment.

### **1.21.2 Conditions of Use**

These procedures are suitable for use at all construction sites with delivery and storage of the following materials:

- Petroleum products such as fuel, oil, and grease
- Soil stabilizers and binders (e.g. Polyacrylamide)
- Fertilizers, pesticides, and herbicides
- Detergents
- Asphalt and concrete compounds
- Hazardous chemicals such as acids, lime, adhesives, paints, solvents, and curing compounds
- Any other material that may be detrimental if released to the environment

### **1.21.3 Design and Installation Specifications**

The following steps should be taken to minimize risk:

- Locate temporary storage area away from vehicular traffic, near the construction entrance(s), and away from conveyance systems and receiving waterbodies.
- Supply Material Safety Data Sheets (MSDS) for all materials stored. Keep chemicals in their original labeled containers.
- Surrounding materials with earth berms is an option for temporary secondary containment.
- Minimize hazardous material storage onsite.
- Handle hazardous materials as infrequently as possible.
- During the wet weather season (October 1 through April 30), consider storing materials in a covered area.
- Store materials in secondary containment, such as an earthen dike, a horse trough, or a children's wading pool for non-reactive materials such as detergents, oil, grease, and paints. "Bus boy" trays or concrete mixing trays may be used as secondary containment for small amounts of material.
- Do not store chemicals, drums, or bagged materials directly on the ground. Place these items on a pallet and, when possible, in secondary containment.
- If drums cannot be stored under a roof, domed plastic covers are inexpensive and snap to the top of drums, preventing water from collecting.

#### **1.21.4 Material Storage Areas and Secondary Containment Practices:**

- Store liquids, petroleum products, and substances listed in 40 CFR Parts 110, 117, or 302 in approved containers and drums and do not overfill the containers or drums. Store containers and drums in temporary secondary containment facilities.
- Temporary secondary containment facilities shall provide for a spill containment volume able to contain precipitation from a 25 year, 24 hour storm event plus 10% of the total enclosed container volume of all containers, or 110% of the capacity of the largest container within its boundary, whichever is greater.
- Secondary containment facilities shall be impervious to the materials stored therein for a minimum contact time of 72 hours.
- Secondary containment facilities shall be maintained free of accumulated rainwater and spills. In the event of spills or leaks, collect accumulated rainwater and spills and place into drums. Handle these liquids as hazardous waste unless testing determines them to be non-hazardous. Dispose of all wastes properly.
- Provide sufficient separation between stored containers to allow for spill cleanup and emergency response access.
- During the wet weather season (October 1 through April 30), cover each secondary containment facility during non-working days, prior to and during rain events.
- Keep material storage areas clean, organized, and equipped with an ample supply of appropriate spill clean-up material.
- The spill kit should include, at a minimum:
  - 1 water resistant nylon bag
  - 3 oil absorbent socks (3-inches by 4-feet)
  - 2 oil absorbent socks (3-inches by 10-feet)
  - 12 oil absorbent pads (17-inches by 19-inches)
  - 1 pair splash resistant goggles
  - 3 pairs nitrile gloves
  - 10 disposable bags with ties
- Instructions

#### **1.21.5 Maintenance Standards**

Any stormwater within the material storage area shall be pumped or otherwise discharged after each rain event. Before pumping, the stormwater must be evaluated to determine if it must go to treatment or can be discharged without treatment. If stormwater is contaminated, direct the discharge to appropriate treatment.

Restock spill kit materials as needed.