

6.0 Other Controls

Proper management and disposal of materials and other construction site wastes is an important part of pollution prevention. Construction site materials that were overlooked as potential sources of storm water contamination in the past should now be managed more carefully. This section will outline the obvious and the not so obvious sources found on sites. These may be materials, practices, or locations where there is a potential risk of pollution. Materials include surplus or refuse building materials as well as hazardous wastes. Practices include trash disposal, material handling, and spill prevention and cleanup measures. Controls and practices should meet any requirements of any federal, state, and local requirements for the project site.

This section discusses some of the waste materials encountered at construction sites and discusses generally how these materials should be stored and handled so that their exposure to storm water is minimized. However, this section does not provide specific detail on how to handle or dispose of these materials. Specific guidance should be obtained from appropriate waste management agencies and/or occupational health and safety agencies.

Typically, there are no specific BMPs that should be used on all construction sites. Only the controls that best address site-specific conditions should be implemented to control erosion and eliminate contamination of storm water. There are three areas of control (in addition to erosion and sediment controls and storm water management) that should be addressed in each SW3P. The controls that should be addressed include:

- Minimization of offsite vehicle tracking of sediments
- Compliance with applicable state or local waste disposal, sanitary sewer, or septic system regulations
- Appropriate pollution prevention measures for allowable non-storm water components of the discharge

These controls are discussed in the following section.

Good Housekeeping

Good housekeeping is basically keeping a clean, orderly construction site. One of the first steps towards preventing storm water contamination is improving housekeeping practices and using good common sense. Good housekeeping practices reduce the possibility of accidental spills, improve response time if there is a spill, and reduce safety hazards as well. Good housekeeping practices are inexpensive, relatively easy to implement, and are often very effective in preventing storm water contamination. Example of good housekeeping practices include:

- Neat and orderly storage of chemicals, pesticides, fertilizers, fuels, etc.

- Regular garbage, rubbish, construction waste, and sanitary waste disposal.
- Prompt cleanup of spills of liquid or dry materials.
- Prompt cleanup of sediments that have been tracked by vehicles or have been transported by wind or storm water onto the site or nearby roadways.
- Control the dumping of excess concrete and concrete wastewater on the site.

Construction Wastes

Construction projects tend to generate a great deal of solid waste material that is unique to this activity. These wastes are sometimes called “construction wastes.”

Construction wastes may include but are not limited to:

- Trees and shrubs removed during clearing and grubbing or other phases of construction.
- Packaging materials (including wood, paper, plastic, etc.)
- Scrap or surplus building materials, e.g. scrap metals, rubber, plastic and glass pieces, masonry products, plywood lumber, and other solid waste materials.
- Materials resulting from the demolition of structures (rubble)

The following steps will help ensure proper disposal of construction wastes:

- Select a designated waste collection area onsite.
- Provide an adequate number of containers with lids or covers that can be placed over the container prior to rainfall.
- When possible, locate containers in a covered area.
- Arrange for waste collection before containers overflow.
- If a container does spill, provide cleanup immediately.
- Plan for additional containers and more frequent pickups during the demolition phase of construction.
- Verify that construction waste is collected, removed, and disposed of only at authorized disposal areas.

- Check the local solid waste management agency for specific guidance.

Hazardous Materials

Many of the materials found at construction site may be hazardous to the environment or to personnel. It is always important to read the labels of the materials or products that you have onsite; they may contain warning information that will indicate a potential problem. At a minimum, any products in the categories listed below are considered to be hazardous:

- Paints
- Acids for cleaning masonry surfaces
- Cleaning solvents
- Asphalt products
- Chemical additives used for soil stabilization (e.g. palliative such as calcium chloride)
- Concrete curing compounds and additives

Most problem situations involving hazardous materials are the result of carelessness or lack of common sense. The practices listed here will help avoid problems associated with the disposal of hazardous materials:

- Check with local waste management authorities to determine the requirements for disposal of hazardous materials.
- Use all of the product before disposing of the container.
- Do not remove the original product label from the container.
- If surplus products must be discarded, do not mix products together unless specifically recommended by the manufacturer.
- Follow the manufacturer's recommended method of disposal.

Contaminated soils are soils that have been exposed to and still contain hazardous substances. Contaminated soils may be encountered onsite during earthwork activities or during the cleanup of a spill or leak of a hazardous product. Material storage areas may also have been contaminated by undetected spills. The nature of the contaminants may or may not be known. A state or local solid waste regulatory agency should be contacted concerning information and procedures necessary to treat or dispose of contaminated

soils. Some landfills may accept contaminated soil; however, laboratory tests may be required prior to a final decision.

Concrete trucks should not be washed out onsite unless sufficient area has been made available to fully contain the wash water. The wash water must be prevented from entering any storm drainage system or waterway.

Sandblasting is a commonly used technique to remove paint, dirt, etc. from surfaces. Sandblasting grits, which consist of both the spent sand and the particles of paint and dirt removed from the surface, are hazardous if they were used to clean old structures where lead, cadmium, or chrome based paints were used. They should not be washed into the storm drain or sanitary sewer. A licensed waste management or transport and disposal firm should be contacted to dispose of this type of grit.

Offsite Vehicle Tracking

Day-to-day practices can have a major impact on storm water contamination because of their potential for generating sediments. A common problem area is offsite vehicle tracking. Two practices are commonly used for minimizing offsite vehicle tracking of sediments: stabilized construction exits and construction access road stabilization.

Controlling offsite tracking of sediments may require attention at most times when there is vehicle traffic at the construction site. The measures listed here are effective if used properly:

- Stabilized construction exits and construction roads are very effective means of reducing offsite tracking of mud, dirt, and rocks.
- Paved streets adjacent to the site should be swept to remove any excess mud, dirt, or rock tracked from the site.
- Deliveries or other traffic should be scheduled at a time when personnel are available to provide cleanup if it is required.

Sanitary Facilities

Consideration should be given to the use of sanitary facilities. The most commonly found facilities are portable facilities that store the sanitary wastes and should be emptied periodically. Other facilities include temporary facilities that employ septic systems for treatment and disposal of the sewage, or temporary facilities that discharge to a sanitary sewer system. Sanitary or septic wastes that are generated onsite should be treated or disposed of in accordance with state and/or local requirements. Depending upon the facilities that will be used onsite, this may require one or more of the following:

- Domestic waste haulers should be contracted to regularly remove sanitary and septic wastes and to maintain the facilities in good working order. This will prevent overloading of the system that could allow discharges to storm water.
- Wastes should be treated to an appropriate level before discharging.
- Facilities should be properly hooked into the sanitary sewer system to prevent illicit discharges.
- Untreated, raw sewage or septage should never be discharged or buried onsite.

Spills

Spills are not only a source of storm water contaminants but can also harm human health. All personnel should be trained in the proper storage and handling of materials. Construction site supervisors should create and adopt a spill control plan that would include measures to:

- Prevent spills.
- Stop the source of a spill.
- Contain a spill.
- Clean up a spill.
- Dispose of contaminated materials properly.
- Identify and train personnel responsible for spill prevention and response plan.

The following measures would be appropriate for a spill prevention and response plan:

- Store and handle materials to prevent spills.
 - Tightly seal containers.
 - Make sure all containers are clearly labeled.
 - Stack containers neatly and securely.
- Reduce storm water contact if there is a spill.
 - Have cleanup procedures clearly posted.
 - Have cleanup materials readily available.
 - Contain any liquid.
 - Stop the source of the spill.
 - Cover spill with adsorbent material such as kitty litter or sawdust.

- Dispose of contaminated materials according to manufacturer's instructions or according to state or local requirements.
- Identify personnel responsible for responding to a spill or toxic or hazardous materials.
 - Provide personnel spill response training.
 - Post names of spill response personnel.
- Keep the spill area well ventilated.
- If necessary, use a private firm that specializes in spill cleanup.