Stormwater Best Management Practice

General Construction Site Waste Management

Minimum Measure: Construction Site Stormwater Runoff Control
Subcategory: Good Housekeeping/Materials Management

Description
Construction staff manage and dispose of building materials and other construction site wastes to reduce the risk of pollution to stormwater. Practices such as trash disposal, recycling, proper material handling, and spill prevention and cleanup measures can reduce the potential for stormwater flow to mobilize construction site wastes and contaminate surface or ground water.

Applicability
Proper management and disposal of wastes will reduce pollution in stormwater discharge from any construction site. Good waste management practices include properly locating refuse piles, covering materials that stormwater discharges might displace, and preventing spills and leaks from hazardous materials.

Siting and Design Considerations
Waste management practices vary depending on the type of waste being managed, whether it is hazardous, and whether it might contaminate stormwater. Below are examples of management practices for different categories of construction site waste.

General Solid Wastes:
- Designate a waste collection area on-site that does not receive a substantial amount of stormwater flow from upland areas and does not drain directly to a waterbody.
- Ensure that containers have lids to cover them when it rains, or keep containers in a covered area whenever possible.
- Schedule waste collection to prevent the containers from overfilling.
- Clean up spills immediately. Use an absorbent material such as sawdust or cat litter to contain the spill.
- During the demolition phase of construction, provide extra containers and schedule more frequent pickups.
- Collect, remove and dispose of all construction site wastes at authorized disposal areas. Contact a local environmental agency to identify these disposal sites.

Hazardous Materials and Wastes:
- For spills of hazardous materials, follow cleanup instructions on the package or, if applicable, the Safety Data Sheet.
- Consult with local waste management authorities about the requirements for disposing of hazardous materials.
- Never remove the original product label from the container—it contains important safety information. Follow the manufacturer’s recommended method of disposal, which should appear on the label.
- Never mix excess products when disposing of them, unless the manufacturer specifically recommends doing so.
- For soils containing hazardous substances, consult with state or local solid waste regulatory agencies or private firms to ensure proper disposal. Some landfills might accept contaminated soils, but they require laboratory tests first.
- Construction staff often use sandblasting to remove paint and dirt from surfaces. This produces sandblasting grits—sand and paint and dirt particles. Sandblasting grits from older structures are hazardous, because they are more likely to contain lead-, cadmium- or chrome-based paints. To ensure
proper disposal of sandblasting grits, contract with a licensed waste management or transport and disposal firm.

Pesticides and Fertilizers:
- Follow all federal, state and local regulations that apply to the use, handling or disposal of pesticides and fertilizers.
- Do not handle the materials any more than necessary.
- Store pesticides and fertilizers in a dry, covered area.
- Construct berms or dikes to contain stored pesticides and fertilizers in case of spillage.
- Follow the application rates and methods specified on the product label.
- Have equipment and absorbent materials available in storage and application areas to contain and clean up any spills.

Petroleum Products:
- Store new and used petroleum products for vehicles in covered areas with berms or dikes in place to contain any spills.
- Immediately contain and clean up any spills with absorbent materials.
- Have equipment available in fuel storage areas and in vehicles to contain and clean up any spills.

Detergents:
- Detergents that contain phosphorus and nitrogen are common in wash water for cleaning vehicles. Excesses of these nutrients can be a major source of water pollution. Use detergents only as recommended and limit their use on the site. Do not dump wash water containing detergents into the storm drain system; direct it to a sanitary sewer or capture and contain it for transport to a wastewater treatment plant for proper treatment.

Limitations
An effective waste management system requires training and signage to promote awareness of the hazards of improper storage, handling and disposal of wastes. Site superintendents should be aware of worker habits and inspect storage areas regularly. They may need to spend extra management time to ensure that all workers are following the proper procedures.

Maintenance Considerations
Construction staff should inspect storage and use areas and identify containers or equipment that could malfunction and cause leaks or spills. In addition, it is important for staff to check equipment and containers for leaks, corrosion, support or foundation failure, or other signs of deterioration, and test them for soundness. Construction staff should immediately repair or replace any defective containers.

Effectiveness
Waste management practices are effective only when all construction staff follow them consistently. In storage and use areas, site superintendents should post the guidelines for proper handling, storage and disposal of construction site wastes. In addition, site superintendents should ensure that workers receive training in these practices to ensure that everyone is knowledgeable enough to participate.

Cost Considerations
The costs associated with construction site waste management include purchasing and posting signs, increased management time for oversight, additional labor needed for special handling of wastes, transportation costs for waste hauling, and fees charged by disposal facilities to take the wastes.

Additional Information
Additional information on related practices and the Phase II MS4 program can be found at EPA’s National Menu of Best Management Practices (BMPs) for Stormwater website

Disclaimer
This fact sheet is intended to be used for informational purposes only. These examples and references are not intended to be comprehensive and do not preclude the use of other technically sound practices. State or local requirements may apply.