

## Equipment and Vehicle Washing

Uncontrolled equipment and vehicle washing has the potential to result in high loads of nutrients, metals, hydrocarbons, and organics being discharged to stormwater collection systems. Consider the following BMPs for equipment and vehicle washing:

- All equipment and vehicles that come in contact with raw materials, product, or waste should be washed in a designated area (e.g., wash station) designed to collect and contain wash and rinse water. The wash water should be treated and/or discharged to the sanitary sewer (not the storm sewer) or an oil water separator. The wash water discharge must be authorized by the owner/operator of the sanitary sewer.
- Wash automobile exteriors at a wash station or in a location where wash water is contained onsite or the wash water runoff flows to gravel, grass, or other permeable surface. Prohibit the use of cleaners containing phosphate. Only use biodegradable neutral pH cleaners. The quantity of wash water should be minimized as much as possible. Use hoses with nozzles that automatically turn-off when not in use. There should be no discharge of floating solids or visible foam in other than trace amounts.
- Use a commercial car wash.

## Recycling and Waste Storage

Material recycling and waste storage are an often overlooked area with a substantial potential for impact of stormwater runoff. Consider the following BMPs for recycling and waste storage areas:

- Provide covers or enclosures for material recycling and waste handling, transfer, and storage areas to eliminate stormwater exposure.
- Provide secondary containment structures for liquid waste tanks and containers (e.g., used oil) to afford source control and prevent stormwater exposure.
- Provide stormwater diversion to prevent stormwater contact at recycling and waste disposal areas.

- Maintain a routine schedule for waste and recycled material pick-up.
- Do not dispose of liquid waste in trash cans or dumpsters.
- Keep the lid or top closed on trash cans and dumpsters to minimize contact with precipitation.
- Maintain housekeeping. Pick up trash and litter. Do not allow trash and litter to accumulate on the ground.
- Use and dispose of all material in accordance with label instructions.
- Empty, remove residue, and seal containers before they are staged outside for recycling.



The Dripster says "Stormwater...Let's Keep it Clean"

### Related Flyer

### Richland County Industrial and High Risk Runoff Program

### For Additional Information Concerning BMPs

#### Contact

#### Richland County Department of Public Works Storm Water Management Division

- Phone: (803) 576-2424 or 576-2408
- Internet:

<https://richlandcountysc.gov/Government/Departments/Public-Works/Stormwater-Management>

#### South Carolina Department of Environmental Services

- Phone: (803) 898-4300
- Internet:

<https://scdhec.gov/npdes-permit-stormwater>

#### U.S. Environmental Protection Agency Storm Water Program

- Phone: (202) 564-0768
- Internet: [www.epa.gov/npdes/stormwater](http://www.epa.gov/npdes/stormwater)



## Industrial and High Risk Runoff Best Management Practices



## Richland County Stormwater Management



## Industrial and High Risk Runoff Stormwater Best Management Practices

Industrial and high risk facilities can contribute significant pollutant loadings to stormwater runoff.

Richland County has

developed this flyer to inform industrial and high risk facility owners and operators about stormwater Best Management Practices (BMPs) that can significantly reduce the amount of pollution discharged in stormwater runoff. The BMPs profiled are provided for informational purposes and as typical examples only, and are not intended to be mandatory or all inclusive of available BMPs.

## BMPs

The fundamental component of an effective stormwater management program is the development and

implementation of BMPs. A stormwater BMP may be a technique, measure, or structural control which is utilized to reduce pollutant exposure to stormwater, manage the quantity, and/or improve the quality of stormwater runoff. Structural BMPs improve the quality and/or control the quantity of runoff while non-structural (e.g., procedural) BMPs reduce or eliminate the pollution entering the stormwater runoff. The purpose of a BMP is to ensure that activities and/or operations are performed in a manner that will manage, minimize, and mitigate contamination of stormwater discharges.

There is a wide range of stormwater BMPs that are available for use by industrial and high risk facilities. Selection and implementation should be based on activity, operational and facility specific conditions. When evaluating your facility activities and operations for selection and implementation of storm water BMPs, consider the following:

- Routine and seasonal operations.
- Equipment and vehicle maintenance activities.
- Grounds maintenance activities.
- Shipping and receiving areas.
- Recycling, refuse, and waste disposal areas.
- Material handling, transfer, and storage areas.

## Material Handling, Transfer and Storage

Responsibly managing material handling, transfer, and storage activities can significantly reduce material exposure and the probability that the material will end up in stormwater runoff. Consider the following BMPs for material handling, transfer, and storage activities:

- Handle, transfer, and store raw materials and products in a secure building enclosure to eliminate stormwater exposure.
- Provide secondary containment structures for bulk material tanks and containers to afford source control and prevent stormwater exposure.
- Provide stormwater diversion to prevent stormwater contact at material handling, transfer, and storage areas.
- Control stormwater runoff by collecting and directing stormwater discharges to retention/detention ponds.
- Use material handling and transfer procedures that reduce the chance for leaks or spills. Do not leave leaks and spills unattended. For example, perform material transfer under constant observation to allow immediate clean-up if a spill or leak occurs.
- Remove all residues from equipment and drain all fluids from equipment if it is to be stored outside for an extended period (e.g., equipment bone yard).
- Manage material piles (e.g., sand, gravel, clay, wood, etc.) to minimize stormwater exposure (e.g., limit stormwater contact) and transport of sediment (e.g., provide grass filter strips to enhance infiltration and sediment deposition).
- Implement good housekeeping on a daily basis to reduce material exposure. For example, routinely sweep, blow, or vacuum dry material handling and transfer areas to prevent accumulation and eliminate material exposure.
- Perform routine documented inspections of material handling, transfer, and storage areas to identify and correct potential stormwater pollution issues (e.g., leaks, spills, residue, trash, etc.).
- Conduct training to educate employees on BMPs for material handling, transfer, and storage.

## Erosion Control

Sediment transport due to erosion and site disturbance activities can be a significant source of

pollutant loading in stormwater runoff. Consider the following BMPs for erosion control:

- Vegetative cover to provide soil stabilization (i.e., grass, shrubs, etc.)
- Vegetative filter strips to intercept stormwater sheet flow and provide filtration and infiltration.
- Riprap, check dams, silt fences, etc. installed in ditches to reduce stormwater flow velocity and settle sediment before being discharged.
- Roof drains, catch basins, drop inlets, and constructed storm drains to collect and direct stormwater runoff.
- Retention/detention ponds to control stormwater flow and allow sediment to settle.
- Inspection and maintenance program designed to preserve the effectiveness and structural integrity of all erosion control devices.

## Grounds Maintenance

Grounds maintenance activities include grass mowing, shrub pruning, leaf blowing, debris disposal,

pesticide/herbicide/fertilizer application, pest control, and equipment fueling and storage. Consider the following BMPs for lawn grounds maintenance activities:

- Handle, transfer and store all grounds maintenance equipment, gasoline cans, motor oil, fertilizer, and chemicals in a secure building enclosure that is not exposed to stormwater. Routinely inspect the storage area for leaks, spills, residue, and trash. Clean as needed.
- Restrict the use of pesticides, herbicides, and fertilizers to the greatest extent possible. Strictly follow label instructions for proper methods of application, application rates, when to apply, and proper disposal of containers and residuals.
- Collect grounds maintenance debris for curbside or contract pickup. Do not place grounds maintenance debris in catch basins, drop inlets, or drainage ditches.
- Allow grass clippings to mulch in place or place in bags.

