Commercial/Industrial - Best Management Practices (BMPs)

The Commercial/Industrial section provides a description of minimum BMPs options for high priority categories. High priority commercial establishments included are:

- Automobile mechanical repair, maintenance, fueling or cleaning
- Equipment repair, maintenance, fueling, or cleaning
- Automobile and other vehicle body repair or painting
- Automobile parking lots and storage facilities
- Retail or wholesale fueling
- Pest control services
- Eating or drinking establishments
- Mobile carpet, drape or furniture cleaning
- Cement mixing or cutting
- Painting and coating
- Botanical or zoological gardens and exhibits
- Landscaping
- Nurseries and greenhouses
- Golf courses, parks and other recreational areas
- Pool and fountain cleaning

A. POLLUTION PREVENTION

The following pollution prevention principles apply to most commercial sites:

- Use smaller quantities of toxic materials or substitute less-toxic materials.
- Minimize the volume of cleaning water to decrease wastewater.
- Provide signage to remind or instruct employees and customers.
- Implement a spill response plan.
- Segregate and recycle wastes.
- Provide a schedule of preventive maintenance.
- Train employees in pollution prevention initially and then periodically as needed.

B. MINIMUM BMPs FOR HIGH PRIORITY COMMERCIAL FACILITIES

1. Non-Structural BMPs

Non-structural control BMPs consist of procedures and practices that prevent pollutants from entering the storm drain system. Because of their low cost and simplicity, source control BMPs should be considered first in the development of a facility's BMP program. Many of these methods already may exist as part of the standard operating procedures for a site:

A) Good Housekeeping Practices

Good housekeeping practices are designed to maintain a clean and orderly work environment. A clean work environment reduces the possibility of accidental spills caused by mishandling of chemicals or equipment and should reduce safety hazards to facility personnel. Good housekeeping measures are or will be implemented in an effort to prevent pollutants from entering storm water discharges.

- Information on good housekeeping practices should be distributed during employee training sessions.

- Good housekeeping measures should be discussed at employee meetings.

- Employees should be informed of activities that could potentially cause contamination of storm water and the importance of carefully conducting these activities in areas that do not discharge/drain to storm drains.

- Good housekeeping tips and reminders should be posted on employee bulletin boards.

B) Preventive Maintenance

Onsite equipment needs to be maintained in good working condition. The preventive maintenance program shall include regular inspections and testing of facility equipment. The storm water preventive maintenance program and BMPs shall expand the current preventive maintenance program to include storm water considerations.

C) Material Storage Practices

Hazardous waste and materials used shall be properly identified, handled, and stored; and instructions shall be given to all site personnel. Improper storage of these materials can result in accidental spills and the release of materials. Any underground or aboveground storage tanks shall be designed and managed in accordance with applicable regulations, be identified as a potential pollution source, and have secondary containment, such as a berm or dike with an impervious surface.

D) Material Inventory Procedures

Site personnel should maintain an up-to-date inventory of all hazardous materials and wastes used at the facility. Chemicals used at the facility should be handled with adequate precaution. Hazardous and toxic materials used at the site must be identified, quantified, and managed in compliance with federal, state, and local regulations. In addition, materials should be recycled, reclaimed, and/or reused to reduce the volume of materials brought into the facility when possible, and less toxic or non-toxic materials should be substituted for toxic materials.

E) Solid Waste Handling and Recycling

Waste disposal areas should be kept free of litter and debris. Waste receptacles must have a cover or lid to prevent the contents from being dispersed by the wind or coming in contact with storm water. All recyclable wastes such as batteries, solvents, waste oil and anti-freeze should be stored in a covered area that prevents contact with storm water.

F) Train Employees

Create a training manual and retain records of employees attending.

G) Spill Response Plan

Spills and leaks are one of the largest contributors of storm water pollutants. An effective plan shall have spill prevention and response procedures that identify potential spill areas, specify material handling procedures, describe spill response procedures, and provide spill clean-up equipment. The plan should take steps to:

- Identify and characterize potential spills
- Eliminate and reduce spill potential
- Respond to spills when they occur in an effort to prevent pollutants from entering the storm water drainage system.

H) Record Keeping

Record keeping and internal reporting represent good operating practices as they increase the efficiency of the facility and the effectiveness of BMPs. A good record keeping system facility minimizes incident recurrence, responds with appropriate cleanup activities, and complies with legal requirements.

A record keeping and reporting system shall be set up to document spills, leaks, and other discharges, including discharges of hazardous substances in reportable quantities. Spills and other discharges are to be reported in accordance legal requirements. Incident records describe the quality and quantity of non-storm water discharges to the storm sewer. These records should contain the following information:

- Date and time of the incident
- Weather conditions
- Duration of the spill/leak/discharge
- Cause of the spill/leak/discharge
- Response procedures implemented
- Persons notified
- Environmental problems associated with the spill/leak/discharge

2. Structural BMPs

Structural BMPs consist of specialized equipment, structural components, or engineered technologies that can be used when source control BMPs are ineffective. Because structural BMPs are site specific, the facility operator needs to evaluate each proposed use. Proper installation and regular maintenance of structural BMPs are imperative to their effectiveness. Examples are as follows: (Appendix D)

- Overhead coverage of outdoor work areas or chemical storage;
- Retention ponds, basins, or surface impoundments that confine urban runoff to the site;
- Constructed wetlands
- Berms and concrete swales or channels that divert run-on and runoff away from pollutant sources;
- Secondary containment structures; and treatment controls, e.g., infiltration devices and oil/water separators, to reduce pollutants in storm water
- Biofilters
- Storm drain media inserts
- Divert to the sewer system.

3. BMP Standard

BMPs must be able to reduce pollutants in storm water runoff *to the maximum extent practicable*.

4. Designated High Priority Commercial Facilities

The following activities at high priority commercial sites must implement the BMPs addressed in the attached tables in Appendix A:

- Hazardous Material Storage (Table 1)
- Solid Waste Storage (Table 2)
- Loading/unloading of Significant Materials (Table 3)
- Vehicle Fueling (Table 4)
- Landscaping/grounds keeping (Table 5)

- Vehicle/Equipment Washing (Table 6)
- Cleaning and maintaining parking lots (Table 7)
- Outdoor Equipment Storage (Table 8)
- Cleaning and maintaining rooftops (Table 9)
- Wastewater Treatment (Table 10)
- Vehicle Maintenance (Table 11)

5. Hazardous Materials Management

Many commercial facilities handle hazardous materials during different stages of operation. All hazardous materials and hazardous wastes must be handled, stored, or disposed of as required by all applicable local, state, and federal regulations. For more information, facility operators should contact their County Hazardous Materials inspector or the County Hazardous Materials Division duty specialist at (619) 338-2231. Operators of plant (flora) production facilities (greenhouses and nurseries) and certain non-plant-production operations (golf courses, pest control services, botanical or zoological gardens, cemeteries, parks, and recreational facilities) should contact the County Department of Agriculture, Pesticide Regulatory Program, at (858) 694-3122 for information regarding the storage and handling of hazardous materials and wastes.