

OBJECTIVES

- Reduce the potential for specific pollutants discharging to waterways
 - General Trash
 - Metals
 - Oil and Grease
 - Bacteria
 - Sediment
 - Organic/inorganic chemicals
- Reduce or prevent polluted discharges from municipal yards
 - Design considerations
 - Spill Response and Control
 - General Practices

DESCRIPTION

Municipal yards generally encompass a variety of individual facilities including storage areas, maintenance sheds, fueling areas, and offices. Organizing and selecting proper BMPs, along with a maintained yard, ensures both safety and the reduction/prevention of polluted discharges.

CONSIDERATIONS

Development of a comprehensive map of the municipal yard that includes locations of stormwater devices (catch basins, oil/water separators, containment, etc.), detention/retention facilities (storage tanks, detention basins, etc.), and Low Impact Development (LID) features (vegetated swales, porous pavement, infiltration basins, etc.) will aid in organizing a municipal yard with consideration to reducing the potential of polluted discharges to waterways.

Identify specific boundaries for the municipal yard. Identify runoff and runoff locations with respect to stormwater where specific or groups of BMPs may be affected.

See other appropriate BMP fact sheets for further information regarding material storage, vehicle & equipment practices, training, and non-stormwater discharges.

An NPDES industrial permit may be required for certain facilities that at times may be located in the defined boundaries of a municipal yard. See BMP Fact Sheet GH-28, Facility Maintenance for more information.

Keep outdoor stockpile and storage areas away from waterways or drains to the Maximum Extent Practicable (MEP). Add secondary containment devices and berms/dikes/etc. to reduce the potential for run-on and run-off

RECOMMENDATIONS AND PROTOCOLS

Municipal yards tend to contain a variety of individual facilities, along with areas dedicated for certain municipal activities (vehicle & equipment cleaning, fueling, storage, and maintenance; storage areas (indoor and outdoor), salt storage, hazardous materials, and so on). Implementation of the recommendations outlined in this fact sheet, along with selection of more specific fact sheets, will reduce/prevent polluted discharges.

For the objectives listed, the following represent further recommendations and protocols for municipal yard maintenance:

Reduce the potential for specific pollutants discharging into waterways

General Trash and Bacteria

- Keep cleaning devices (brooms, disposal containers, vacuums, and so on) in nearby locations
- Do not wash down areas that may contain bacteria where run-off may be received by a waterway
- Develop a daily cleaning regiment for removal of litter and debris in the yard
- Follow waste handling and disposal protocols. See BMP Fact Sheet GH-7, Waste Handling and Disposal for more information

Metals

- Metal scraps stored in the yard and contribute pollutants to stormwater if exposed to rain
- Follow protocols established in BMP fact sheets for vehicles & equipment and non-stormwater discharges to reduce the potential of pollutants

Oil & Grease and Inorganic/Organic Chemicals

- Facilities and activities associated with vehicles & equipment and material storage can contribute to polluted discharges and non-stormwater discharges
- Through design considerations, reduce the potential of polluted discharges by placing items away from waterways or conveyances that may carry pollutants to waterways
- Consider containment devices for individual facilities or locations designated for certain activities in locations in the yard that may contain items that may pollute waterways with oil, grease, or chemicals.

Sediment

- For certain facilities that cannot be covered with tarps, implement containment devices and/or temporary-type BMPs such as silt fences, straw "wattles," check dams, and so on to control sediment run-off

Reduce or prevent polluted discharges from municipal yards

Design considerations

- After development of a map outlining natural (trees, waterways, etc.) and artificial (storm drains, fences, etc.) features, place individual (fueling area, storage areas, etc.) facilities in locations that will reduce the potential for polluted discharges to receiving waters
- Consider containment devices around the defined boundaries of the yard including berms, "isolated" catch basins, silt fence, straw wattles, check dams, infiltration devices, oil/water separators, and so on in locations that follow natural drainage patterns

Spill Response and Control

- Individual facilities may contain a spill response kit. However, at a minimum, a spill response station should be located within the boundaries of a municipal yard
- Train employees on spill response procedures; see BMP Fact Sheet GH-10 Spill

Prevention and Control for more information.

General Practices

- Store bagged and boxed materials on pallets.
- Keep ample supply of appropriate spill clean up material near storage areas.
- Provide general monitoring of the yard area on a daily basis
- Do not organize yard in a compacted manner
- Refer to BMP Fact Sheet GH-5 for non-stormwater discharges and recommended practices for preventing/reducing polluted discharges
- If temporary-type erosion and control BMPs (silt fence, check dams, etc.) are used, they need to be maintained for proper operation and replaced as necessary to ensure proper operation.

DOCUMENTATION

Proper documentation practices are essential for any municipal SWMP to show compliance with the Clean Water Act, NPDES, and generally the requirements of the permit issued to allow discharges through the defined MS4. As with all sections of an MS4 permit, all documentation should be centralized.

For municipal yard maintenance, templates are provided within the BMP manual to assist the municipality with documentation compliance. The templates can be used for compliance; however, the following documents are recommended as a minimum for compliance:

- **Training Record:** This document is used to provide record of a training event or session relative to the municipal yard where a separate BMP Fact Sheet providing training guidance does not exist.
- **Training and Education Log:** Enter a completed training record for municipal yard maintenance into the log.
- **Event Record:** If a discharge is observed in the municipal yard area, an event record should be executed that also outlines response and remediation procedures. Exposed outdoor areas should be noted after major rain events requiring an event record.
- **Activity Record:** Complete when remediation is conducted or improvements are made the municipal yard. Specific remediation will depend on the individual facilities located in the yard.
- **Inspection Record:** Complete an inspection based on the recommendations in the section titled "INSPECTIONS AND MEASUREMENTS" of BMP fact sheets of facilities or activities located within the boundaries of the yard.
- **Inspection, Event, and Activity Log:** Enter an inspection, activity, or event record into the log as outlined within this BMP.
- **Municipal Yard Map:** Organize and complete a municipal yard map (including locations of interior building features). Identify the natural and artificial features on the map. Include individual facilities or locations for certain activities on the map as recommended in other BMP fact sheets. Place a copy of the map within your SWMP documentation.

BMP Fact Sheet: GH-26 Municipal Yard Maintenance

Effectiveness can be demonstrated by several means. Two specific types of measurements include (1) properly implementing and maintaining practices (and documentation of implementation and maintenance) recommended in this fact sheet and the specific BMP fact sheets for facilities located within the yard and (2) establish sample sites as part of a monitoring program. A successful monitoring program will require collecting and testing samples of stormwater runoff at or near runoff/runon locations at identified boundaries of the yard. Absence of specific pollutants in tested samples would demonstrate effectiveness of implemented BMPs.

SOURCES

Michigan Pollution Prevention/Good Housekeeping Activities Guide at
http://www.michigan.gov/documents/deq/wb-sw-ms4-PollutionPrevention_Housekeeping_321187_7.pdf

U.S. Environmental Protection Agency Municipal Facilities Management at
<http://cfpub.epa.gov/npdes/stormwater/menuofbmps/index.cfm?action=browse&Rbutton=detail&bmp=130&minmeasure=6>

CALTRANS BMP Field Manual, January 2003 edition at
http://www.dot.ca.gov/hq/construc/stormwater/BMP_Field_Manual_Master_5x8_revision5.pdf