

## OBJECTIVES

- Reduce or prevent polluted discharges
  - Specific Pollutants
  - Standard & Alternative Practices
- Spill Response and Control

## DESCRIPTION

Municipal parking and storage areas outside of municipal yards generally possess the greatest potential for contributing pollutants to stormwater run-off or result in non-stormwater discharges. Specific consideration to these types of areas in maintenance programs will reduce/prevent pollutants from entering waterways.

## CONSIDERATIONS

In lieu of curb-enclosed islands in parking lots, consider non-curbed landscaped islands including rain gardens. Bioretention or filter devices should be designed into areas surrounding parking lots.

Add municipal parking lots to street sweeping activities if possible. See BMP Fact Sheet GH-33 Street Sweeping for more information.

## RECOMMENDATIONS AND PROTOCOLS

For the objectives listed, the following represent further recommendations and protocols for parking and storage area maintenance:

### Specific Pollutants

- Keep parking and storage areas free from litter and trash by following a general cleaning schedule.
- Maintain trash receptacles to discourage litter
- Post "No Littering" signs and consider enforcement abilities (such as fines)
- Use absorbent materials for oily discharges or spots
- Municipal parking lots can be added to the street sweeping schedule of work
- Build-up of oil & grease, organic/inorganic chemicals, metals, and sediment can occur in parking and storage areas. Follow recommendations in corresponding BMP fact sheets for additional measures to reduce/prevent polluted discharges

### Standard & Alternative Practices

- Allow sheet run-off to flow to biofilters or containment devices
- Minimize inventory of raw materials in storage areas
- Utilize dry cleaning methods before wet methods
- For wet cleaning procedures, block off storm drain inlets/basins and contain run-off
- Train employees on material storage and pollution prevention goals and techniques.
- Consider pervious paving surfaces in the parking lot areas
- For surface repairs, utilize temporary-type BMPs (filter fabric, sand bags, etc.) to protect nearby inlets
- If dust is an issue with storage areas, use only minimal amounts of water for dust

## BMP Fact Sheet: GH-27 Parking and Storage Area Maintenance

control-ensure temporary-type BMPs or containment devices are operating prior to dust control operations

- Keep ample supply of appropriate spill clean up materials near storage areas.
  - Complete a cleaning activity of storage and parking lot areas prior to projected rain events that would most likely produce stormwater run-off
  - Remove sediment build-up along curbs or in/adjacent to inlets
  - Repair surfaces or features in dry weather conditions
- Monitor and remove miscellaneous debris (leaves, twigs, etc.) in a timely manner
- 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.

### Spill Response and Control

- Containment devices and temporary-type BMPs (silt fence, straw "wattles," etc.) are considered spill control techniques for outdoor material storage.
- Train employees on spill response procedures
- Refer to BMP Fact Sheet GH-10, Spill Prevention and Control for more information

## 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 parking and storage area 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 parking lot and storage area maintenance.
- **Training and Education Log:** Enter a completed training record into the log.
- **Event Record:** If a discharge is observed in a parking lot or storage area, an event record should be executed that also outlines response and remediation procedures.
- **Activity Record:** Complete when remediation is conducted or improvements are made to parking lot and storage areas, such as replacment of paving and installation of temporary-type BMPs.
- **Inspection Record:** Complete an inspection based on the recommendations in the section titled "INSPECTIONS AND MEASUREMENTS" or as outlined in your SWMP
- **Inspection, Event, and Activity Log:** Enter an inspection, activity, or event record into the log as outlined within this BMP.

## INSPECTIONS AND MEASUREMENTS

Frequency of inspections for storage areas is recommended as follows:

## BMP Fact Sheet: GH-27 Parking and Storage Area Maintenance

- *Rain Event Inspection:* Conduct an inspection of the storage after a defined rain event (if storage area is located outside). A defined rain event is determined in the SWMP. It is recommended to complete an inspection and remediation prior to a forecasted "major" rain event.
- *Regular Inspection:* If a rain event does not dictate an inspection, inspect the parking lot and storage areas every two weeks.

Items that should be inspected and maintained in parking lot and storage areas (and recommended maintenance actions)(see corresponding BMP fact sheets outlining additional recommendations for storage areas for additional guidance):

*Cleanliness:* Sweep and remove debris or trash

*Trash Receptacles:* Empty on a regular basis. Replace damaged receptacles

*Isolation measures:* assure implemented measures (i.e. berms, containment devices, and so on) are sound and in working order

*Filters and/or containment devices:* ensure devices are in sound working order

*Tarps or plastic sheets (if applicable):* repair or replace torn or damaged tarps or plastic sheets. Ensure tarps are not "flapping" in the wind.

*Paving surface:* "Isolate" and clean-up oily discharges (or other types of potential pollutants)

*Temporary-type BMPs:* Silt fences, straw "wattles, check dams, and so on should properly installed and functioning. Remove built-up debris or sediment as necessary. Replace defunct or damaged materials.

*Stockpiles:* Ensure stockpiles have proper coverage and material/debris is not "washing away."

## SOURCES

California Stormwater Quality Association, Municipal Stormwater Best Management Practice Handbook (2004 edition) at <http://www.cabmphandbooks.com/Municipal.asp>

U.S. Environmental Protection Agency Parking Lot and Street Cleaning information at <http://cfpub.epa.gov/npdes/stormwater/menuofbmps/index.cfm?action=browse&Rbutton=detail&bmp=99&minmeasure=6>