

## OBJECTIVES

- Develop a comprehensive O&M Program and pollution prevention plan
  - Training
  - Documentation
  - Pollution Prevention
  - Maintenance Activities

## DESCRIPTION

Municipalities generally possess a number of facilities and open space (including parks and roadways) that requires maintenance activities (e.g. mowing, painting, cleaning, repairs, and so on). Maintenance activities associated with municipal buildings and grounds can contribute to polluted stormwater runoff or directly discharge as a non-stormwater discharge. A comprehensive Operation and Maintenance Program, including corresponding O&M Manuals and/or Stormwater Pollution Prevention Plans (SWPPP) can reduce the potential for polluted discharges to receiving waterways.

## CONSIDERATIONS

Complete an inventory list of all municipal facilities (buildings and grounds) and activities that may or may not be associated with such facilities (mowing, asphalt repairs, etc.). The appendix of this manual includes a template for completing a municipal inventory list.

From time-to-time, municipal operations may include special or infrequent activities such as fire sprinkler line flushing, pesticide applications, and HAZMAT operations. Plans should provide a note or consideration to such special activities including responsible parties and response protocols.

When developing a comprehensive pollution prevention plan, consider descriptive overviews of selected Best Management Practices (BMPs) such as outlined in this manual or developed individually.

## RECOMMENDATIONS AND PROTOCOLS

For the objectives listed, the following represent further recommendations and protocols for building and grounds maintenance:

### Training

- Ensure training components have the ultimate goal of reducing or preventing polluted discharges from operational activities and facilities
- Each BMP selected for an O&M Program should include training for municipal employees and/or contractors
- Frequency of training should consider the complexity of particular operations and the nature/size of staff

### Documentation

#### *Operation and Maintenance Program (O&M Program)*

- Should include descriptions of maintenance activities and corresponding schedule of maintenance actions
- Can be the Operational Plan within the Municipal Pollution Prevention/Good

Housekeeping Plan (MS4 PPGHP)(or SWPPP)

- Identify and list responsibilities for maintenance actions including training actions
- Consider the BMPs selected for development

*Municipal Pollution Prevention/Good Housekeeping Plan (MS4 PPGHP)*

- Plan and organize the content of the plan along with responsible persons for the implementation of the plan
- Assess operations and inventory facilities and activities
- Consider and outline regulatory requirements
- Identify BMPs for implementation including training components
- Implement BMPs and conduct training to assure proper practices
- Evaluate the plan periodically for improvements, along with reviews of documented activities

*General Documentation*

- Most regulatory requirements (such as an MS4 Permit) require extensive documentation practices. The documentation "proves" you are implementing and maintaining your goals and objectives of your plan(s)
- Documentation should be centralized

**Pollution Prevention**

- When developing the operation and maintenance component of plans for building and grounds, establish a balance between capabilities and good practices to reduce and/or prevent pollution to the Maximum Extent Practicable (MEP)
- Ensure pollution prevention measures for municipal operations complements the goals and objectives of the entire SWMP
- Ensure spill response and prevention measures (including plans) are up to date and accessible
- Follow recommendations outlined in selected or developed BMPs for reducing the potential for polluted discharges
- Ensure BMPs selected correspond to actual municipal activities and facilities

**Maintenance Activities**

*Buildings*

- When pressure washing buildings or similar structures use waste water collection devices if soap or detergents are used, filter the water if soap or detergents are not used, and ensure sheet flow in lieu of a concentrated stream if washing in a grassed area
- Use drop cloths or other collection devices for painting, sandblasting, or similar activities
- Provide temporary-type BMPs such as filter fabric and straw wattles to control run-off from wash water
- Refer to appropriate BMP fact sheets for guidance on specific activities such as waste management & disposal, hazardous materials, and training
- Use common sense for protecting waterways, storm drains, or storm sewer systems during building maintenance activities especially when activities occur on or adjacent to impervious paving or inlets.

*Grounds*

- Refer to appropriate BMP fact sheets for more specific guidance regarding landscape maintenance, street sweeping, material storage, and lawn fertilizers
- Ensure use of mulch or other erosion control measures for exposed soils and/or Disturbed Soil Areas (DSAs)
- Develop protocols and training schedules for fertilizer and pesticide management
- Provide temporary-type BMPs if recommended by a fact sheet or developed BMP, or as a result of a common sense approach to protecting receiving waters

**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 building and grounds maintenance, templates are provided within the BMP manual to assist the municipality with documentation compliance. The templates can be used for compliance. There are no specific templates recommended for this BMP, as specific BMP Fact Sheets should be referenced for an O&M program for buildings and grounds. However, the following documents should be a part of a municipal program subject to an NPDES permit at a minimum:

- **Municipal Pollution Prevention/Good Housekeeping Plan (MS4 PPGHP)**  
(Sometimes referred to as a Stormwater Pollution Prevention Plan (SWPPP))
- **Operation and Maintenance Program (O&M Program):** Includes the operational plan(s) of an MS4 PPGHP
- **Records:** Documentation of all maintenance activities should be kept centralized including training records, schedules, reports, maps, activity records, event records, MSDS, and so on

**SOURCES**

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>

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

San Diego Stormwater Co-permittees Jurisdictional Urban Runoff Management Program at <http://www.projectcleanwater.org/pdf/Model%20Program%20Municipal%20Facilities.pdf>

Pennsylvania Department of Environmental Protection; final version of PAG-13 at <http://files.dep.state.pa.us/Water/Watershed%20Management/WatershedPortalFiles/StormwaterManagement/PAG-13/FinalPAG-13.pdf>