Sample MCM 6 Related Information

- Operations & Maintenance (O&M) Plan/Inspection Forms
- Stormwater Pollution Prevention Plan (SWPPP)
- Training Forms
- MS4 Management Technology Solutions
- Helpful Links/Resources
- Funding Sources
MCM #6: Good Housekeeping for Municipal Operations

MCM #6 requires MS4s to prepare an inventory of municipal facilities and activities, and to develop a stormwater "Operations & Maintenance Plan" for each facility/activity on the inventory. The content of both will vary depending on the requirements of the jurisdiction, but the "BMP #1" (the inventory) and "BMP #2" (the operations & maintenance plan) must address all the activities on the inventory. MS4s that choose to use the model should provide a copy of what is on the model. The details on the model should include the facilities/activities on the inventory, which are often conceptual, and therefore in need of what is on the model. The details on the model should include the facilities/activities on the inventory, which are often conceptual, and therefore in need of what is on the model.

**BMP #1: Inventory of Facilities/Activities**

<table>
<thead>
<tr>
<th>Facility/Activity</th>
<th>Storm Sewer System impact</th>
<th>Discharge To</th>
<th>Q&amp;M Responsibilities (all include &quot;signage&quot;)</th>
<th>Attachment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public works yard</td>
<td>inlets, piping, basin</td>
<td>Spring Creek</td>
<td>oil management, inlets, fueling, vehicle wash water</td>
<td>1</td>
</tr>
<tr>
<td>Streets</td>
<td>inlets, swales</td>
<td>Spring and Trout Creek</td>
<td>sweeping, inlets</td>
<td>2</td>
</tr>
<tr>
<td>SW conveyances</td>
<td>pipes, swales, ditches</td>
<td>Spring and Trout Creek</td>
<td>cleaning</td>
<td>3</td>
</tr>
<tr>
<td>Buildings</td>
<td>inlets, rain gardens</td>
<td>Spring Creek</td>
<td>inlets, rain gardens</td>
<td>4</td>
</tr>
<tr>
<td>Parking lots</td>
<td>inlets</td>
<td>Spring and Trout Creek</td>
<td>inlets</td>
<td>5</td>
</tr>
<tr>
<td>Parks</td>
<td>inlets</td>
<td>Spring and Trout Creek</td>
<td>inlets</td>
<td>6</td>
</tr>
<tr>
<td>Wastewater plant</td>
<td>swale</td>
<td>Spring Creek</td>
<td>chemicals, vehicles, maintenance area, sludge</td>
<td>7</td>
</tr>
<tr>
<td>Transfer station</td>
<td><em><strong>N/A outside the Borough: Provide information to Clearview Township</strong></em></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
# Operations & Maintenance Plan

**BMP#2: O&M Actions (Detail)**

**Attachment #1: Public Works Yard**

(Contact: John Smith, Yard Manager)

<table>
<thead>
<tr>
<th>Responsibility</th>
<th>When and How Often?</th>
<th>Actions</th>
<th>Additional Considerations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clean Catch Basin</td>
<td>Each Fall</td>
<td>- Haul to landfill.</td>
<td>Check after each major storm (&gt; 3&quot;)</td>
</tr>
</tbody>
</table>
| Fuel               | Daily               | - Ensure tanks are sound, have overflow protection, are protected from vehicle and forklift damage.  
                      |                     | - Label valves.                                                        |                           |
|                    |                     | - Nozzles have auto shutoff. Auto shutoff for severed hoses.              |                           |
|                    |                     | - Secondary containment.                                                 |                           |
|                    |                     | - Concrete fueling pad.                                                  |                           |
|                    |                     | - Overhang roof structure.                                               |                           |
|                    |                     | - Spot-cleaning leaks and clean up used absorbent.                       |                           |
|                    |                     | - Label drains to indicate where they flow.                              |                           |
|                    |                     | - Report leaking vehicles.                                               |                           |
| Wash Water         | Daily               | - Wash on gravel area or take to commercial car wash most of the time. Collect and dispose of vehicle wash water when chemical additives, solvents or degreasers are used. Allow no wash water to enter storm sewer or stream. |                           |
| Road Salt and Grit | Daily               | - Use grit mix suited to ambient temperature to minimize salt use.        |                           |
|                    |                     | - Keep rain off stored salt.                                             |                           |
|                    |                     | - Calibrate spreaders.                                                  |                           |
|                    |                     | - Haul and store salt in dry weather.                                    |                           |
|                    |                     | - Sweep up spills around storage/loading area                             |                           |
# Operations & Maintenance Plan

## Attachment #2: Streets

Contact: Dusty Rhodes, Streets Superintendent

<table>
<thead>
<tr>
<th>Signage (for each activity below)</th>
<th>Daily</th>
</tr>
</thead>
<tbody>
<tr>
<td>Street Sweeping</td>
<td>Do twice in spring; mid-summer and fall. Check signs in spring.</td>
</tr>
<tr>
<td></td>
<td>o Post no-parking signs for street sweeping</td>
</tr>
<tr>
<td>Storm inlets</td>
<td>Inspect after each heavy rain. Clean inlets in fall, additionally if clogged</td>
</tr>
<tr>
<td></td>
<td>o Haul clean-out materials to landfill o Maintain stencils on inlets.</td>
</tr>
</tbody>
</table>

*Provide similar details for Attachments #3-8.*

*IDDE and Staff training are additional, separate efforts.*

*Report satisfaction of above in Annual Reports to DEP.*

*Keep record of issues (like spills that were identified, cleaned up and repeats prevented). Don’t try to say you never have spills.*

*Food for thought: A simple list of actions specifically tailored to the municipality, with an identified responsible party, is better than glossy generic materials that do not describe what you actually do and who is responsible for it.*
POLLUTION PREVENTION/GOOD HOUSEKEEPING
FOR MUNICIPAL OPERATIONS:

A GUIDANCE DOCUMENT
OF
BEST MANAGEMENT PRACTICES
AND
INSPECTION CHECKLISTS

WNY
Stormwater
Coalition

Erie County Department of Environment and Planning
Division of Environmental Compliance Services
**VEHICLE AND EQUIPMENT MAINTENANCE/STORAGE AREA INSPECTION CHECKLIST**

<table>
<thead>
<tr>
<th>COMPONENTS/ITEMS TO CHECK</th>
<th>PROBLEMS OBSERVED</th>
<th>MAINTENANCE/REPAIRS NECESSARY</th>
<th>ACTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Track/equipment</td>
<td>Leaks/spills</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Salt/sand spreader</td>
<td>Improper amount of product applied</td>
<td>Yes</td>
<td>Recalibrate</td>
</tr>
<tr>
<td>Lawn care equipment</td>
<td>Improper operation</td>
<td>Yes</td>
<td></td>
</tr>
</tbody>
</table>

Date of Inspection: ____________  Name: ____________
Frequency: ____________

**Training Module 5**

**Vehicle Equipment Maintenance**

**Pollution Prevention: Good Housekeeping Practices**

1. Identify impacts to stormwater/receiving waters (surface waters)
   - Toxicity
   - Biodegradable oxygen demand

2. Identify and choose appropriate solutions (e.g., equipment)
   - Conduct maintenance work indoors - if work must be performed outside, guard against spills of materials that could discharge to storm sewers
   - Seal floor drains that discharge directly to the environment, if possible
   - Increase angle of slope of vehicle beds - dedicate one (or more) beds that have no (or several) floor drains for regular maintenance
   - Clean up spilled materials immediately, using "dry" methods
   - Install groundwater systems (oil/water separators) where necessary in sewer lines to capture contaminants (oil, gas), and maintain as needed
   - Store in a vehicle maintained with fuel tank
   - Identify appropriate recycling/disposal options for waste

3. Inspection procedure
   - Inspect for maintenance purposes floor drain systems, oil/water separators
   - Minimize "packed" vehicles equipment for leaks

4. Maintenance procedures
   - Minimize a clean work area - reduce contaminants from floors, tools, etc., using "dry" methods
   - Use non-antiseptic solutions
   - Remove or replace any leaking containers
   - Use steam cleaning: pressure washing instead of solvents for part cleaning
   - Store waste fluids in properly sealed, labeled storage containers
   - Store batteries in a lead-proof, compatible (e.g., non-reactive) container
   - Reduce greases from lawn care equipment on permeable (gravel) areas
   - Provide resistant soils if soil maintenance is necessary (cover storm sewers, use secondary containment, etc.)

5. Advisory
   - Report petroleum spills (as necessary) to the NYSEDIC (800-723-2320 or 1-800-347-3752)
   - Refer to NYSEDIC for additional information (Environmental Handbook for Transporters, Operators)
Stormwater Pollution Prevention Plan (SWPPP)

Stormwater Pollution Prevention Plan
for:
Washington Suburban Sanitary Commission
Damascus Wastewater Treatment Plant (WWTP)
23730 Log House Road
Gaithersburg, Maryland, 20882
301-206-7940

SWPPP Contact(s):
Washington Suburban Sanitary Commission
Tom Harshman
Damascus Wastewater Treatment Plant (WWTP)
23730 Log House Road
Gaithersburg, Maryland, 20882
301-206-7940

SWPPP Preparation Date:
August 2014

Stormwater Pollution Prevention Team Staff Responsibilities

<table>
<thead>
<tr>
<th>Staff Names</th>
<th>Individual Responsibilities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plant Superintendent</td>
<td>- Review SWPPP annually</td>
</tr>
</tbody>
</table>
| Chief Plant Operator | - Main contact for SWPPP
- Manage SWPPP Team and delegate tasks
- Review SWPPP annually
- Implement and monitor control measures/BMPs
- Track maintenance and corrective actions
- Maintain control measures/BMPs
- Identify new pollutant sources and maintain records of leaks, spills, or other releases to the environment |
| Plant Engineering Supervisor | - Review SWPPP annually
- Update and revise SWPPP when necessary |
| Plant Operator | - Perform visual assessments, routine inspections, and comprehensive inspections as necessary
- Maintain control measures/BMPs
- Take corrective action where required
- Provide training to others on SWPPP
- Ensure spill response equipment is in good working order and materials are located near potential spill areas
- Identify new pollutant sources and maintain records of leaks, spills, or other releases to the environment |
| Plant Operator | - Take corrective action where required
- Ensure spill response equipment is in good working order and material are located near potential spill areas |

Based on MDE Industrial SWPPP Template, November 1, 2013
• Provide forms to show proof of training for all employees involved in pollution prevention or good housekeeping of a specific municipality/activity (renewed annually)

• Signed by instructor & participant of training

• Reviewed & approved by administrator
• CBI Systems – MS4web permit manager
  • http://www.ms4web.com/MS4StormwaterSoftware/
  • PA MS4Web™ is currently being piloted by municipalities in southeastern Pennsylvania and will soon be introduced in other parts of the state.

• Customized geodatabase – ESRI

• Mobile applications

• Excel spreadsheets or Access database
Helpful Links/Resources

- EPA Pollution Prevention/Good Housekeeping for Municipal Operations

- PADEP MS4 Resources

Funding Sources

• SPC:
  • General reference for a wide range of water resources grants: http://www.spcregion.org/water/regs_grants.shtml

• PENNVEST:
  • Clean Water State Revolving Fund (CWSRF) administered by Pennsylvania Infrastructure Investment Authority (PENNVEST) – http://www.pennvest.pa.gov/Information/Funding-Programs/Pages/Clean-Water-State-Revolving-Fund.aspx#.VhLeB2ddGUk
  • American’s Rivers’ Initiative - Green Loans for Green Reserve Funds – Subsidized Low-Interest Loans to public entities for stormwater management for design, construction and rehabilitation.
  • American Recovery and Reinvestment Act (ARRA) of 2009 - http://www.pennvest.pa.gov/Information/Funding-Programs/Pages/ARRA-2009-Funding.aspx#.VhLd2GddGUk
    • 50% of the Grants must maximize green infrastructure
  • Green Initiative, ARRA Green Reserve and Growing Greener Grants - http://www.pennvest.pa.gov/Information/Funding-Programs/Pages/Green-Initiatives.aspx#.VhLeSGddGUk
Funding Sources

- Department of Community & Economic Development (DCED):
  http://community.newpa.com/programs/

- Flood Mitigation Program – http://community.newpa.com/programs/flood-mitigation-program-fmp/
  - Grants for projects $50,000 - $500,000 - planning & planning approvals are at owner's expense

  - Grants for construction, improvement, repair or rehabilitation of all or part of a flood control system – projects $500,000+

- H2O PA – Water Supply, Sanitary Sewer and Storm Water Projects:
  - Grants for projects $500,000
Funding Sources

- Department of Community & Economic Development (DCED) [cont.]:
  http://community.newpa.com/programs/

- Pennsylvania Infrastructure Bank (PIB) – Low-interest loans
  http://community.newpa.com/programs/pennsylvania-infrastructure-bank-pib/

- Municipal Assistance Program - http://community.newpa.com/programs/municipal-assistance-program-map/
  - Grants up to 50% of eligible cost

  - Projects which involve the construction, improvement, expansion, repair, maintenance or rehabilitation of new or existing watershed protection BMPs – Maximum grant $300,000 with 15% of total project cost
Funding Sources

• Municipal/County Funds – Refer to Municipal/County Websites
  • Community Block Grant Funds (CDBG) – Public facility and planning activities including flood prevention/stormwater management/BMPs/drainage. Maintenance activities are not fundable. Benefit must be for low to moderate income persons/neighborhoods.
  • County Local Share Accounts (gaming funds) – Preference is given to those who have other local or grant match funds.
  • Municipal Local Share Account Funds (gaming funds) – Preference is given to those who have other local or grant match funds.
  • Marcellus Shale Funds

• Department of Conservation & Natural Resources (DCNR) - [https://www.grants.dcnr.state.pa.us/Dashboard/Grants#](https://www.grants.dcnr.state.pa.us/Dashboard/Grants#)
  • Park Rehabilitation & Development Grants – Green infrastructure solutions and BMPs can be part of the design of these facilities.

• Department of Environmental Protection (DEP)
  • Growing Greener Grants – [https://www.portal.state.pa.us/portal/server.pt/community/growing_greener/13958](https://www.portal.state.pa.us/portal/server.pt/community/growing_greener/13958)