Pollution Prevention & Good Housekeeping

For MS4 Operators
September 2007

NPDES Program for Storm Water

Industrial
- Wide-ranging application
- Based on SIC Codes

Construction
- Land Disturbances ≥ 1 acre

Municipal
- "Communities" in Urban Area
- Includes non-traditional entities such as ODOT & State Universities

Municipal Operations Requiring Industrial Storm Water NPDES Permits

WWTP > 1 MGD or Pretreatment Program
Shipping Port
Steam Electric Power Plants
Composting Facilities
Airports
Landfills
Maintenance activities for the MS4
- Include schedules, activities and long-term inspection procedures
- Procedures for waste disposal for materials removed from the system
- Procedures to evaluate new flood management projects to incorporate water quality practices

MS4 Permit Establishes Requirements for Other Municipal Operations

- Develop an O&M Program for Municipal Operations
  - Must include a training component
  - Must include
    - Maintenance and storage yards
    - Municipal streets and parking lots
    - Fleet and building maintenance
    - Parks and recreation facilities
    - Municipal construction operations
    - Waste transfer stations
    - Sand/salt storage and snow disposal areas

Implementing Storm Water Pollution Prevention

Best Management Practices for Municipal Operations
BMP #1: Storm Water Pollution Prevention Plans

- “SWP3s” for maintenance yards are similar to industrial storm water SWP3s:
  - Pollution prevention team
  - Identify potential pollutant sources
  - Map drainage system of facility
  - List BMPs to address pollutants
  - Identify non-storm water discharges
  - Comprehensive site evaluation

BMP #2: Inspections

- Assure facilities comply with SWP3
- Inspection schedule and frequency
  - Develop a checklist for each facility
  - Set a schedule for inspection
  - Provide training to inspectors

FIELD INSPECTION WORKSHEET

MS4 SWMP Evaluation
MS4 Maintenance Facility Field Inspection Worksheet

<table>
<thead>
<tr>
<th>Material storage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Are all materials that are potential stormwater contaminants stored under cover or in secondary containment?</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Hazardous waste management</th>
</tr>
</thead>
<tbody>
<tr>
<td>Are all hazardous materials properly labeled and stored to prevent exposure to stormwater runoff?</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Waste management</th>
</tr>
</thead>
<tbody>
<tr>
<td>Are waste bins covered with waste properly disposed in containers?</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Spill response</th>
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<tbody>
<tr>
<td>Does the facility have a spill response plan, and are spill kits readily available?</td>
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</table>

<table>
<thead>
<tr>
<th>Employee training</th>
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<tbody>
<tr>
<td>What type of stormwater training do maintenance staff receive?</td>
</tr>
</tbody>
</table>

Notes or additional information:

BMP #3: Train Employees

- Staff training records
  - Agenda
  - Attendance lists
  - Materials used
  - Road maintenance crews particularly important
- Enforcement of policies and procedures
  - Employee Issues
- Training will help identify issues

Sample Training Material
**Turf Maintenance**

*Introduction*

Fertilizer, pesticides, and wastes used for maintenance of turfgrass maintenance facilities may enter the sanitary sewer system through runoff from maintenance vehicles. Turfgrass maintenance should be conducted in ways that minimize the impact on both human health and the environment.

**Questions for thought**

1. What are the benefits of sustainable turfgrass maintenance?
2. What are the environmental impacts of poor maintenance practices?

**Vehicle Maintenance**

- Use drip pans when changing oil
- Use funnels and spigots to reduce spills
- Store wastes properly
- Perform indoors
  - Connection to sanitary
  - Approved oil/water separator

**Vehicle Washing**

- Do not wash vehicles or equipment outdoors
  - Indoors with plumbing to sanitary sewers
  - Take to commercial wash facility

**Vehicle Washing**

- Car wash
- Portable truck wash unit captures washwater

**Leaking Equipment**

- Leaking equipment
- Absorbent to clean up spill
Drum Storage

Don’t keep outdoors

Store inside in proper containment

Fuel Islands

Dike provides containment

Do not store on site. Dispose of properly off-site!

Dumpster Management

Dumpsters should be lidded and well-maintained

Scrap Materials in Yard

Dispose of properly off-site!
Leaf Collection/Composting

Bermed composting area

Salt (De-icer) Storage

Stone in a dome or other covered structure
Sweep up salt that is tracked outside

Miscellaneous Sources

Leaking battery storage
I illicit cross connections to storm sewers

Miscellaneous Sources

Trash & Debris from Recycling Activities
Runoff from Stockpiles

Assistance for Municipal Operations Program

- US EPA Webcast at
  - http://www.epa.gov/npdes/training
- Financing a Municipal Storm Water Program
- Killing Two Birds with One Stone: Building a Local Program to Maintain Storm Water BMPs and Pollution Prevention for Municipal Operations

For More Information

Websites
- USEPA http://cfpub.epa.gov/npdes/home.cfm?program_id=6
- Ohio EPA www.epa.state.oh.us/dsw/storm/index.html

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