Preparing a Pollution Prevention and Good Housekeeping Plan

Ohio EPA Northeast District Office
Quarterly Storm Water Workshop
September 20, 2007

Goal of this Presentation:
Give community personnel a template and information to begin to complete and implement a PPGHP

Document has blanks to be filled in
Sample PPGHP Document Provided

Pollution Prevention and Good Housekeeping for Municipal Facilities and Operations

Initial Steps in PPGHP Preparation

- Involve facility manager or operations manager
- Use PPGHP templates provided (to mark on during inspection)
- Locate or prepare site plan or map (to mark on during inspection) (or draw one during inspection)

Mark up a site plan during the initial inspection
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Initial Steps in PPGHP Preparation

Initial Inspections
Identify:
• Points of storm water discharge from the site/operations
• Presence/location of any non-storm water discharges
• Location and type of operations occurring
• Location and type of materials storage or handling occurring

Outline of the Sample PPGHP Document:
1.0 Introduction and Purpose
2.0 Description of the Municipal Facility and/or Operations
3.0 Description of Proposed Storm Water BMPs
4.0 PPGHP Site Inspection and Recording Keeping
Attachments:
Site plan
Site Inspection Forms

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2.0 Description of the Municipal Facility and/or Operations

3.0 Description of Proposed Storm Water BMPs
3.1 Pollution Prevention Training for Employees
• Experienced workers or other trained personnel will be used to train facility employees.
• Training will be completed and documented once per year for all appropriate personnel.
• New personnel will be required to review and understand this document prior to initiating work activities.
• Maintain a record of training dates, topics, and attendees
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3.1 Pollution Prevention Training for Employees

Successful pollution control relies on proper training and education of employees. It is essential that employees understand and implement the BMPs that apply to operations within each facility.

Emphasize the importance of keeping pollutants out of the storm drains.

3.0 Description of Proposed Storm Water BMPs

3.2 Eliminating Illicit and Non-Storm Water Discharges

- Provide well-marked proper disposal or collection methods for solid or liquid waste.
- Train employees in proper disposal of non-storm water.
- Label all storm drain inlets and catch basins.
- Periodically inspect and maintain the facility operations and BMPs.
- Periodically inspect, maintain, and clean out storm drain inlets.

3.3 Spill Prevention, Control, and Cleanup

Small spills: These are spills that can be wiped up with a shop rag.

Medium-sized spills: These are spills too large to wipe up with a rag. Medium-sized spills will be contained and soaked up using dry absorbent material.

Large spills: Spills will be contained and cleaned using a minimum amount of wash water. Storm drain inlets or sewer inlets will be plugged to prevent the spill from entering the MS4. Temporary plugs will be kept onsite for the facility inlets and employees will be trained in when and how to use them.

Spill Prevention, Control, and Cleanup

Goal: prevent spills and leaks, maintain a regular inspection and repair schedule, and correct potential spill situations.

Promote quick and effective response.

Spills will be contained and soaked up using dry absorbent material.
3.0 Description of Proposed Storm Water BMPs

3.4 Outdoor Equipment Operations

The equipment operations BMPs for this facility are as follows:

- Equipment will be placed on an impermeable surface, or a drip pan will be installed beneath the potential leak points of the equipment.
- The amount of rainwater that contacts the equipment will be minimized wherever possible.

3.5 Outdoor Materials Storage and Handling

Material storage area alternatives:

- With a roof or covering so that no direct rainfall contacts them runoff controls to prevent run-on of storm water.
- On a paved area with a drainage system sloped to minimize water pooling with appropriate containment or runoff controls.
- Covered with plastic sheeting, secured with weights such as tires or sand bags with appropriate containment or runoff controls.
- If uncovered or uncontained, drainage is controlled before the ultimate discharge point.

Inspect storage areas for possible exposure of pollutants to storm water runoff.

Cover bulk solid materials, raw materials, and construction materials, or supplies stored outdoors.

Materials of concern on the facility include gravel, sand, lumber, topsoil, compost, concrete, metal products, etc.
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3.0 Description of Proposed Storm Water BMPs

3.6 Waste Handling and Disposal
• Shop trash will be kept in a dumpster
• Liquid wastes are kept out of the dumpster
• Waste metal is collected for delivery to a scrap metal dealer
• Hazardous materials or wastes are stored in accordance with the Hazardous Materials Management Plan for the facility
• Waste oil, antifreeze, spent solvents, and other liquids from vehicle maintenance activities are recycled
3.0 Description of Proposed Storm Water BMPs

3.7 Vehicle and Equipment Washing/Steam Cleaning

- Wash areas are clearly marked.
- Sumps or drain lines are installed to collect wash water for treatment and discharge to the sanitary sewer.
- Equipment and vehicle washing takes place inside a building designed for maintenance or equipment storage. All drains from the wash area are connected to the sanitary sewer.
- A commercial car wash is used to wash the facility vehicles and equipment.
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3.0 Description of Proposed Storm Water BMPs

3.8 Materials Receiving/Handling Areas
- Sources of potential pollutants when rainfall and run-on contact spilled raw materials, dust, and motor fluids
- Store indoors or minimize outdoors exposure to storm water
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3.0 Description of Proposed Storm Water BMPs

3.9 Vehicle and Equipment Maintenance and Storage Areas

- Minimize exposure to rain.
- Drip pans or containers are kept under the vehicles at all times during maintenance.
- Fluids are drained from any retired vehicles kept on-site for scrap or parts. Drip pans or containers are kept under the vehicles.
- A berm or other runoff controls will be installed to prevent run-on and run-off. Drainage will be directed to a connection to the sanitary sewer system.

Vehicle and Equipment Maintenance and Storage Areas

Vehicle and equipment maintenance should be performed in an indoor garage.

Outdoor vehicle maintenance takes place in an area designated for vehicle maintenance.
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3.0 Description of Proposed Storm Water BMPs

3.10 Vehicle and Equipment Fueling Areas

- Designed and operated to minimize the potential for spilled fuel and leaked fluids
- Protect fueling areas from vehicle impacts
- Keep spill materials nearby
- Utilize double-walled tanks and/or secondary containment
- Isolate from storm water runoff

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Vehicle and Equipment Fueling Areas

Fueling areas are designed and operated to minimize the potential for spilled fuel and leaked fluids coming into contact with storm water.

Fueling areas ideally should drain to a sump.

Fueling areas should be separated from the rest of the yard.
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3.11 Facility Good Housekeeping Activities
- Facilities and operations should be kept clear of debris and litter
- Storm drain inlets should be cleaned regularly

3.12 Facility and Municipal Construction Activities
Disturb greater than one acre of ground must satisfy the requirements of the Ohio EPA Construction Permit (Ohio EPA Permit No. OHC000002) dated April 20, 2003.

3.13 Storm Water Management: Water Quality Controls
Examples:
- Oil-Absorbent Materials
- Permanent floating booms
- Vegetated Swale or Channel
- Catch Basin Filters
- Sediment and/or water quality basins

4.0 Reporting and Record Keeping Requirements
4.1 Inspection Checklist
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4.0 Reporting and Record Keeping Requirements

4.2 Non-Storm Water Discharge Visual Inspection

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4.0 Reporting and Record Keeping Requirements

4.3 Storm Water Discharge Visual Inspection

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4.0 Reporting and Record Keeping Requirements

4.3 Storm Water Discharge Visual Inspection

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4.0 Reporting and Record Keeping Requirements

4.4 Annual Inspection

Workshop Exercise

Site Assessment
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Information Available

- OEPA- www.epa.state.oh.us/dsw/storm/index.html
- ODNR- www.dnr.state.oh.us/soilandwater/urbanstormwater.html
- ODOT - www.dot.state.oh.us/stormwater/
- NEMO – http://nemo.osu.edu/
- Consultant Community

Thank You for taking time out of your schedules to attend the workshop.

Should you have any follow up questions or want to discuss any topics or information please feel free to contact:

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