

# Pollution Prevention & Good Housekeeping for Municipal Operations



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**Office of Industrial Waste**

# Phase II

## Municipal Pollution Prevention Program Requirements:

- **Develop a program to reduce and prevent discharge of pollutants from municipal operations and facilities**
- **Address Multi- Sector Facilities**
- **Implement Best Management Practices (BMPs)**
- **Develop measurable goals**
- **Training of Municipal Staff**
- **Annual Report to DEC**



# 9 Categories of Municipal Operations

## 1) Street & Bridge Maintenance



# 9 Categories of Municipal Operations

## 2) Winter Road Maintenance



# 9 Categories of Municipal Operations

## 3) Stormwater System Maintenance



# 9 Categories of Municipal Operations

## 4) Vehicle & Fleet Maintenance



# 9 Categories of Municipal Operations

## 5) Parks & Open Space Maintenance



# 9 Categories of Municipal Operations

## 6) Municipal Building Maintenance



# 9 Categories of Municipal Operations

## 7) Solid Waste Management



# 9 Categories of Municipal Operations

## 8) Streambank & Hydrologic Habitat Maintenance



# 9 Categories of Municipal Operations

## 9) New Construction and Land Disturbances



# Typical Municipal Operations

- Highway Dept
- Parks
- Fueling Operations
- Sewer Dept
- Fleet Maintenance
- Solid Waste Collection
- Fire / Police
- Municipal Building

# Fixed Facilities



**Typical Maintenance Yard**





## Vehicle Washing





## Bulk Material Storage







# Field Operations

# Right of Way Work





## Construction Run-off







## **Stream Bank Erosion**

**Lack of  
Riparian Buffer**



# **Monroe County Municipal Operations**

- **21 Parks, 1 Marina**
- **650 County Highway Miles**
- **178 County Bridges**
- **22 County Operated Buildings**
- **Fueling Operations**
- **Community College**
- **Fleet Maintenance**

**Using the Guidance Document  
to Perform a  
Municipal Assessment**

# Monroe County Stormwater Coalition

## Guidance to Developing an Effective Pollution Prevention and Good Housekeeping Program





# Monroe County Parks Department Stormwater Management Plan

## Parks to be addressed by the SWMP

Black Creek	Churchville	Durand Eastman	Ellison
Genesee Valley	Greece Canal	Highland	I-Bay Marine
Lehigh Valley	Mendon	Northampton	Oatka
Ontario	Powdermill	Seneca	Seneca Park Zoo
Tryon	Webster	Wetlands	

## Potential sources of pollution generated by operations and facilities.

Fertilizer/Pesticide Application	Hazardous Waste Material Storage
Golf Courses	Fuel Storage/Dispensing
Septic Pumpouts	Septic Systems
Pet Waste	Building Washing
Sidewalk Cleaning	Sidewalk Salting
Road Salting	Restaurants
Outdoor Vehicle Washing	Road Salting
Salt Storage	Salt Vehicle Washing

## Management practices already implemented that address stormwater quality

Integrated Pest Management	Litter Control
Recycling	Spill Planning
Alternative Products Usage	Sidewalk, Street, Parking Lot Sweeping
Inspection of on-site systems	Erosion Control Practices
Inspections of drainage system	Maint., repair system components
Recycle used automotive fluids	Sensitive, priority waterbody considerations

## *Developing a Plan*

### **Step 1: Understand What's Required**

- **Develop a Program**
- **Establish Measurable Goals**
- **Select and Implement BMP's**
- **Report on Progress**

## *Developing a Plan*

# Step 2: Develop an Inventory

### **Fixed Facilities:**

**DPW Garage, Municipal Buildings, Community Center, Fire Dept. etc**

### **Operations:**

**Street Repair/Maint., Landscape Maint.,  
Drainage System Operation, Animal Control**

## *Developing a Plan*

### **Step 3: Conduct an Assessment**

- **Identify Existing BMP's**
- **Determine Pollution Sources**
- **Identify Facilities/Operations to be covered under the plan**

# Municipal Stormwater Assessment

Place an "X" in the box if the activity occurs at a location.  
 Items in **BOLD** are BMP's. Check all that apply

## Municipal Facilities and Operations from Inventory

Activity	DOT Garage	Parks and Recreation	Sewer Dept.	Fire Dept.	Solid Waste Collection	Municipal Offices
<b>Street and Bridge Maintenance</b>						
Sidewalks and Parking Lots cleaned						
Street Maintenance						
Striping/Painting Performed						
Bridge and Structure Maintenance						
Ditch Maintenance						
Maintenance of unpaved roads performed						
<b>Current BMP's</b>						
Staff have been trained re. Stormwater mgmt Principles						
Street Sweeping						

## *Developing a Plan*

### **Step 4: Develop BMP's & Measurable Goals**

- **Develop based on type of operation**
- **Unified approach across operations**
- **Implementation schedule**

## BMP Summary Sheet

**Department Name:**  
**Category of Municipal Operations:**

**BMP Title:**

**BMP Description:**

**Measurable Goals:**

**Timeline/Implementation Schedule:**

**Specific Components and Notes:**

**Responsible Party for this BMP**

*Indicate who specifically is responsible for the implementation and monitoring of this BMP. This should be the individual who is actively involved with the BMP.*

Name:

Department:

Phone:

E-mail:

# BMP Summary Sheet

Department Name:

Category of Municipal Operations: **Stormwater System Maintenance**

**BMP Title:** **Catch Basin/ Inlet Structures**

**BMP Description:**

- Staff should regularly inspect the storm drain system to identify problems.
- Any deterioration threatening structural integrity should be immediately repaired.
- Catch basins should be cleaned before the sump is 40% full. Cleaning frequently should be scheduled as needed to meet this standard.
- Clean catch basins, inlets and other conveyance structures in high pollution load areas before the wet season to remove accumulated sediment and debris.
- Conduct inspections more frequently during wet season for problem areas where sediment or trash accumulates more often.
- Keep accurate logs of the number of catch basins cleaned and record the amount of waste collected.
- Store any collected waste appropriately away from inlets or streams. If waste is collected by vactor follow procedures for dumping of vactor waste.

**Measurable Goals:**

Approximate quantity (tons or cubic yards) of material cleaned from structures  
Frequency of scheduled cleaning

# BMP Summary Sheet

Department Name:

**Facilities**

Minimum Control Measure: **Municipal Pollution Prevention**

## **BMP Title: Pressure Washing of Buildings**

### **BMP Description:**

In situations where soaps or detergents are used and the surrounding area is paved, pressure washers must use a waste water collection device that enables collection of wash water and associated solids. A sump pump, wet vacuum or similarly effective device must be used to collect the run-off and loose material.

The collected run-off must be disposed of to the sanitary sewer.

If soaps or detergents are not being used and the surrounding area is paved, wash water runoff does not have to be collected but must be screened. Pressure washers must use filter fabric or some other type of screen on the ground and/or in the catch basin to trap particles in wash water runoff.

If activity is performed on grass runoff should be dispersed as much as possible and runoff must remain on the grass and not drain in the pavement.

### **Measurable Goals:**

\*Determine how many buildings require cleaning, cleaning frequency and if these buildings discharge to a combination or separate sewer.

\* Review existing contracts and practices with third parties

\*monitor practices when washing is performed

### **Timeline/Implementation Schedule:**

2008 – Delineate buildings that require cleaning and determine frequency

2009 – Begin to incorporate BMP into existing contracts. Educate contractors, review site specific requirements for wash water collection

2010 – Evaluate program effectiveness and recommend changes if needed

2011 – Revise program to include necessary changes and implement these changes

**Common Sense  
Guiding Principals  
to  
Stormwater Pollution  
Prevention**



*Guiding Principles*

## **Identify Pollution Sources**

- **Material Storage Sites**
- **Outside Loading/Unloading**
- **Pesticide Application Areas**



*Guiding Principles*

## **Prevent Pollution at its Source**

- **Prevent Erosion**
- **Secondary Containment**

## *Guiding Principles*

# **Minimize Pollutant Exposure to Clean Water**

- **Structural Covers**
- **Runoff Diversion**



A person wearing a white protective suit and green gloves is using a spray wand to apply a substance to a body of water. The person is standing in a grassy area next to the water. The background shows a dense line of trees.

*Guiding Principles*

## **Minimize Use of Pollutants**

- **Reduce Road Salt Use**
- **Fertilizers, Pesticides**



*Guiding Principles*

## **Plan for Spills and Accidents**

- **Proper Equipment on Site**
- **Secondary Containment**
- **Post Procedures**



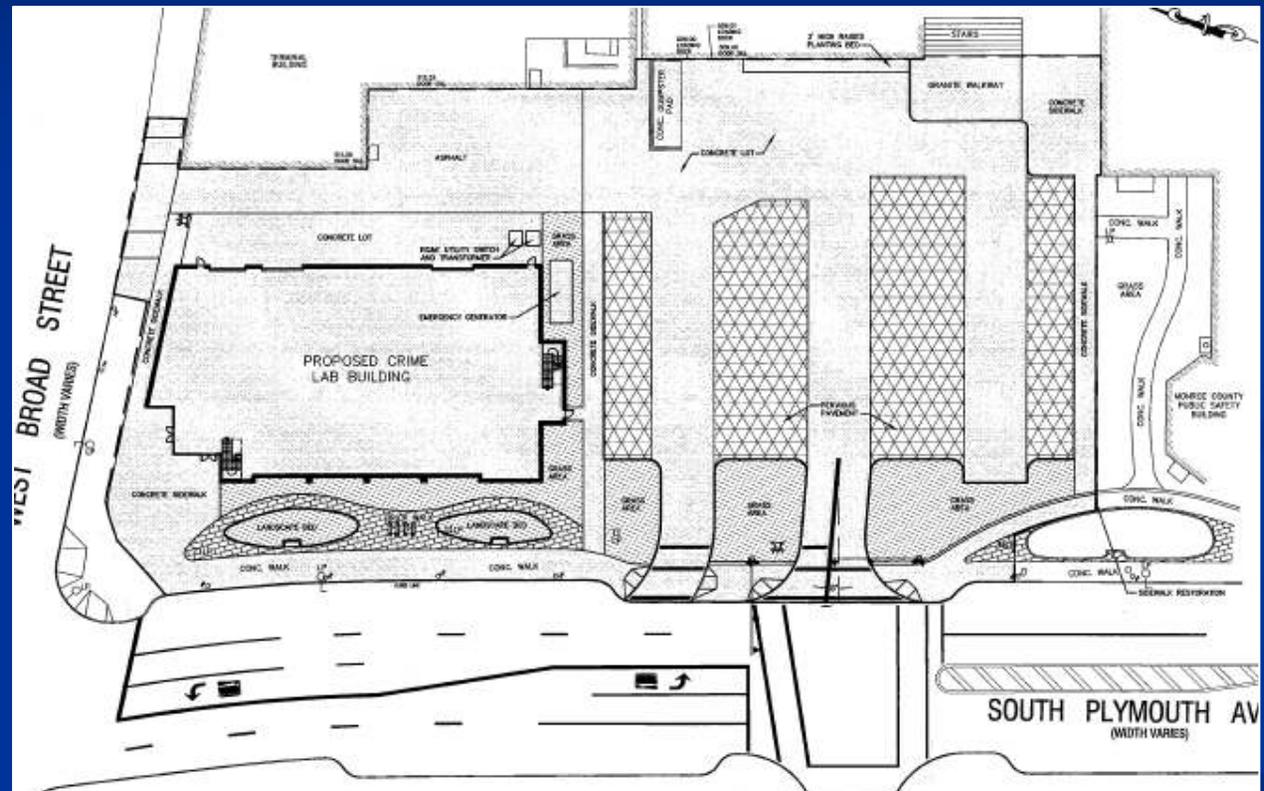
*Guiding Principles*

# Practice Preventive Maintenance

- Drip Pans
- Dry Cleanup
- Establish Inspection Calendar

# Design for Stormwater

- Cistern
- Porous Pavement
- Rain Garden



*Monroe County New Crime Lab*

# Training, Training, Training



# Tracking and Reporting Progress

- **Facilities and Operations Assessed**
- **Describe practices, policies & procedures developed, modified, implemented**
- **Staff training**
- **Effectiveness of program**

# Tracking and Reporting Progress

- **Report at a Minimum:**
  - acres of parking lots swept
  - miles of street swept
  - number of CB's cleaned
  - post-construction management practices
  - pounds of phosphorus applied
  - pounds of nitrogen applied
  - pounds of pesticide applied

# **The Key to Pollution Prevention**

**Only Rain.....**

**.....Down the Drain**

# **Thank You !!**

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