

# **POLLUTION PREVENTION GOOD HOUSEKEEPING FOR MUNICIPAL OPERATIONS**

## **SANILAC COUNTY ROAD COMMISSION OPERATIONS OVERVIEW**

A program of operation and maintenance BMPs will be developed in accordance with the requirements of the General Permit for Storm Water Discharges from Municipal Separate Storm Sewer Systems (MS4s). The County will implement and ensure compliance with this program to prevent and reduce pollutant runoff from road commission operations to the maximum extent practicable.

The County performs several ongoing general maintenance activities which will continue throughout the implementation of this SWMP during this permit period. These maintenance activities are noted below.

- **Storm Water Drainage System Maintenance Including Catch Basin Cleaning:** Storm sewers that are enclosed are repaired as needed and catch basin sumps are cleaned on an as needed schedule in the urbanized area. The open storm water drainage systems within the county road right of way are the responsibility of the Sanilac County Road Commission. These drainage systems will be maintained by the Road Commission using the standard best management practices (BMPs) and proper soil erosion and sediment control BMPs.
- **Water Distribution System Maintenance:** The Road Commission does not own these systems.
- **Sanitary Sewer System Maintenance:** The Road Commission does not own these systems.
- **Street Sweeping:** Is not typically done on county roads. These roads typically drain through a vegetated strip to a vegetated drainage system along the road. These vegetated best management practices trap and hold sediment in lieu of street sweeping. The MDOT and Village of Lexington have street sweeping equipment for use in the urbanized area of Sanilac County.
- **Road Maintenance:** Construction of new road and repair of existing roads.
- **Park and Cemetery Maintenance:** Parking lot maintenance and grounds keeping is not a responsibility of the Sanilac County Road Commission in the urbanized area.
- **Snow Removal:** Snow is removed as needed in the urbanized area, it is not stockpiled in the Urbanized Area
- **Road Crossing and Bridge Maintenance:** The Sanilac County Road Commission is responsible for maintenance of county roads and bridges in the urbanized area and uses proper soil erosion and sediment control procedures during construction activities. During routine maintenance, care is taken to prevent any pollutants from being introduced into stormwater runoff.

## **PLANNED EFFORTS**

The MDEQ administered NPDES General Storm Water Permit (MIS049000) requires specific elements for the Good Housekeeping and Pollution Prevention elements for a program of operation and maintenance BMPs. These requirements call for Employee/Contractor training, development of lists of county owned properties in the urbanized area and existing structural controls, management of vegetated properties, fleet maintenance and storage yards, care of parking lots, roadways, bridges (if present), and minimizing the effects of winter road maintenance. These are all activities that the Sanilac County Road Commission is committed to with subsequent actions and evaluation methods that are located in the SWMP REPORTING section of this plan.

### **Employee/Contractor Training**

Existing employees will be trained prior to the expiration of the NPDES permit, while new employees will be trained within their first year of employment. Specific training for contractors must be completed prior to work being performed. All training must include possible impact to water quality and pollution prevention through proper management. Contract documents should contain a clause or paragraph stating that the contractor shall have minimally one MDEQ certified stormwater operator either for construction or industrial site on their staff that will be inspecting the work site during a project. Contractor training can be done with contract language or with brochures. In contract documents the Road Commission will require contractors constructing roads to have a certified stormwater operator on staff.

Contractors hired to apply pesticides or herbicides must have staff that have been trained and certified by the Department of Agriculture.

Employee training will be done in cooperation with the Village of Lexington.

### **Structural Storm Water Control Effectiveness**

Any existing or future structural controls shall be inspected and maintained properly so they continue to perform as designed and continue to reduce pollutants to surface waters of the State to the maximum extent practicable. Examples of structural controls are Manholes, catchbasins, detention basins, infiltration best management practices, outlet structures and specifically designed vegetated systems in place specifically to clean stormwater runoff.

A list of these structural controls in the urbanized area and within the county road right of way and not a system owned or operated by the Village of Lexington or MDOT, shall be developed for inventory and management purposes. The list of any structures meeting these criteria will contain site specific information (design and operational parameters) and location information.

The Road Commission will have procedures to dispose of operation and maintenance wastes (e.g. dredge spoil, accumulated sediments, floatables) in accordance with Part 111 (hazardous waste), Part 115 (solid waste) and Part 121 (liquid industrial waste). NOTE: the waste stream from catch basin cleaning is defined as “*liquid industrial waste*”

If a new structural control is constructed in the urbanized area and in County Road Commission Right of Way it shall be designed, installed, and maintained as per the County's post construction control regulations and added to the list of structural controls.

### **Roadways, Parking Lots, and Bridges**

Sanilac County has 113,809 feet (21.6 miles) of gravel road and 5,609 feet (1.1 miles) of paved roads in the Urbanized Area. There are no parking lots or bridges in this area under jurisdiction of the road commission.

The Sanilac County Road Commission will construct, operate and maintain its streets, highways, parking lots, roads and county owned or operated impervious infrastructure in a manner to reduce pollutant loading discharging to storm drainage systems. This activity will include:

- Reduction of Total Suspended Solids (TSS) from all paved surfaces in the urbanized area to the maximum extent practicable.
  - Vegetative buffers will be used as much as possible to keep TSS at a low level.
  - Staff will recognize and report when areas need to have vegetation re-established
  - Roadside drainage ditches will be maintained with vegetation. It should be noted that this vegetation may be removed during re-establishment of the flow line and the vegetation should be allowed to re-grow naturally with native species, but should be re-established within one year. If not it may be necessary to intervene and plant vegetation that can tolerate the conditions of a roadside drain.
- Reduction of the discharge of pollutants to the maximum extent practicable from snow removal practices, salt and sand applications. It is noted that snow removal and deicer use is a matter of public safety and public safety must remain the primary goal of the Road Commission, there are some measures that can mitigate environmental impact of these activities.
  - The Road Commission will use metering application systems on their salt trucks, these systems will be calibrated at the start of every year.
  - Application rates / speeds will be determined by management and adhered to by operating personnel.
  - Application locations (e.g. road centerlines) will be designated for maximum ability to remain on road surface.
  - Management will attend seminars dealing with methods or procedures to safely reduce salt usage but maintaining a safe driving environment.
  - Records will be kept of the amount of road salt used annually by the county.
  - Use of economically efficient application methods will be researched to help with salt use reduction.
- Activities and actions that will control dust and TSS in runoff from unpaved roads and parking lots.
  - Sweeping efforts at designated intersections where gravel roads meet with MDOT highways will be maintained on an as needed semi-annual basis or more routinely if management determines the need.

### **Fleet Maintenance and storage yards**

It is noted that Sanilac County does not own or operate any fleet maintenance or storage yards in the urbanized area of Sanilac County.

NOTE: A PIPP is required for the salt storage barns, to be developed by October, 2012.

## Managing Vegetated Property

The only vegetated property owned or maintained by the Sanilac County Road Commission is within the road right of way and is related to the drainage systems alongside the roadway. Contractors or employees will be trained in the proper handling and storage of pesticides, herbicides, and fertilizers before handling them. The stormwater impacts will be minimized on these vegetated right of ways. This training will be done during the previously mentioned training. In the case of contractors the training will be with contract language or brochures. Contractors hired to apply pesticides/herbicides must have staff certified by the Department of Agriculture. NOTE: the Sanilac County Road Commission does not spray, a contractor is hired to only spray brush and trees. Herbaceous plants are managed by mowing.

Fertilizers with phosphorus may only be used when the soils are tested for nutrients and phosphorus is shown to be necessary. Construction projects that have seeding and fertilizing addressed in the specifications will reflect similar language.

Roadside mowing of vegetation will only be done to provide for vision safety as required by established safety practices.

The following procedure will be used to manage roadside vegetation buffer erosion and reporting:

### **SANILAC COUNTY ROAD COMMISSION**

#### **Procedure for Roadside Vegetative Buffer Erosion**

- Goal:** Decrease the amount of sediment deposited in roadside drainage ditches.
- Objective:** Development of a procedure to address eroded vegetative buffers between the road and roadside ditch.
- Procedure:** During inspection of rural or urban roads with vegetated shoulders and a road side ditch in close proximity, staff will note location and estimate the size of any eroded areas that are contributing sediment to the ditch or may have a sparse vegetation that will soon be in danger of eroding and causing sediment to enter the road side ditch.

Staff will report the following information:

- Location of site
- Take a picture of the site
- Probable cause of erosion or lack of vegetation to prevent erosion.
- Estimation of area
- Will site need special erosion control practices?
  - Erosion control blanket,
  - Riprap
  - Silt Fence or check dam
- Provide information as to state of existing erosion and assign a priority:
  - High Priority – needs to be addressed within 1 week.
  - Medium Priority – needs to be addressed within 3 weeks.
  - Low Priority – needs to be addressed within 6 weeks.

Site will be re-graded or filled as needed, seeded and stabilized in a proper manner. Plan a site visit to assure vegetation is established well within 4 weeks of seeding. Follow up within 6 months to assure well established vegetation.

**SITE DOCUMENTATION FORM  
ERODED VEGETATED ROADSIDE BUFFERS**

<b>Date of Report</b>	
<b>Site Location:</b>	
<b>Picture taken</b> ___ Yes ___ No	
<b>Probable Cause of Erosion</b>	
<b>Area Estimation</b>	_____ feet in Length    _____ feet in Width
<b>Erosion Present</b>	_____ Gully    _____ Rills    _____ Sheet _____ depth of gully    _____ depth of rills    _____ Area of sheet
<b>Special BMPs needed</b>	_____ Erosion Control Blankets    _____ Riprap _____ Silt Fence    _____ Check Dam    _____ Mulch Other:
<b>Priority Status</b>	_____ High    _____ Medium    _____ Low
<b>Date and Corrective Actions taken</b>	
<b>Follow up Site Visit</b> <b>Picture taken</b> ___ Yes ___ No	Notes on outcome of actions:
<b>Site Stabilized</b> <b>Picture taken</b> ___ Yes ___ No	Is the site stabilized with good vegetation growth? ___ Yes ___ No Date