USEPA Storm Water Phase II Final Rule
NOACA Storm Water Task Force (SWTF)

POLLUTION PREVENTION/GOOD HOUSEKEEPING FOR MUNICIPAL OPERATIONS

Minimum Measure
(Draft Ohio EPA MS4 Permit Section 4.2.6)
Recommended Model Plan-Draft December 5, 2002

Background

NOACA SWTF Illicit Discharge/Good Housekeeping Work Group developed this Model Plan to assist communities in meeting the requirements of the Pollution Prevention/Good Housekeeping for Municipal Operations outlined in the USEPA Storm Water Phase II Final Rule and the Ohio EPA Model Permit Requirements. This Model Plan is broken down into the following sections:

Section 1 - Summary of Requirements
Section 2 - Model Plan Recommendations
Section 3 – Summary Table of Model Plan Recommendations for the Construction Site Runoff Minimum Measure

Section 1 Summary of Requirements

The NOACA SWTF Illicit Discharge/Good Housekeeping Work Group utilized the Ohio EPA August 9, 2002 Draft MS4 (Municipal Separate Storm Sewer System) General Permit Section 4.2.6 to identify the Phase II requirements during the development of the recommendations for this model plan. Ohio EPA requires the following:

Permit requirement: You **must** develop and implement an operation and maintenance program that includes a training component and has the ultimate goal of preventing or reducing pollutant runoff from municipal operations **(**Draft Ohio EPA MS4 Permit Section **4.2.6.1.1),** and

Using training materials that are available from Ohio EPA or other organizations, your program must include employee training to prevent and reduce storm water pollution from activities such as park and open space management, fleet and building maintenance, new construction and land disturbances, and storm water system maintenance**. (4.2.6.1.2)**

In Section 4.2.6.2, Ohio EPA identifies a Decision Process that guides regulated communities in the development of their Pollution Prevention/Good Housekeeping Plan. Section 4.2.6.2.3 specifies a series of activities that must be addressed in that plan if they are applicable in a given community. These activities include:

- Maintenance activities, maintenance schedules, and long-term inspection procedures for controls to reduce floatables and other pollutants to your MS4 **(4.2.6.2.3.1)**
- Controls for reducing or eliminating the discharge of pollutants from streets, roads, highways, municipal parking lots, maintenance and storage yards, waste transfer stations, fleet or maintenance shops with outdoor storage areas, and salt/sand storage locations, and snow disposal areas you operate **(4.2.6.2.3.2).**
- Procedures for the proper disposal of waste removed from your MS4 and your municipal operations, including dredge spoil, accumulated sediments, floatables, and other debris **(4.2.6.2.3.3).**
- Procedures to ensure that new flood management projects are assessed for impacts on water quality and existing projects are assessed for incorporation of additional water quality protection devices or practices **(4.2.6.2.3.4)**.

Section 2 Model Plan Recommendations

The NOACA SWTF recommends that communities utilize the following model plan components, or some applicable equivalent components as necessary, in order to meet and/or exceed the requirements of the Pollution Prevention/Good Housekeeping for Municipal Operations Phase II Minimum Control Measure.

The recommendations include a series of activities that were identified to meet the requirements of the USEPA Phase II Regulations. For each of the activities identified below that is incorporated into a community's pollution prevention plan, the community shouldidentify:

- the department or group of individuals who are affected by the activity,
- the goal of the activity,
- a description of the program to be implemented,
- the records that are to be maintained and the methods to be used to measure compliance,
- the means by which communities will report on the activity, and
- the person(s) responsible for implementing each activity.

The NOACA SWTF Illicit Discharge/Good Housekeeping Work Group has identified 16 activities that communities should consider for inclusion in their pollution prevention plan. The NOACA Model Plan recommends that communities incorporate into their plan all of the activities that they are already implementing, and identify for implementation additional activities that apply to their operations. Finally communities should state why they are not implementing any of the measures, even if it is only that they do not apply to their community. The following table indicates how the 16 recommended activities relate to Sections 4.2.6.1.2 and 4.2.6.2.3:

Section 4.2.6.1.2 Classification	Activity	Section 4.2.6.2.3 Classification Subsection
Park And Open Space Management	Landscaping Chemical Usage	4.2.6.2.3.1
	Open Space Management	4.2.6.2.3.1
	Leaf Recycling Program	4.2.6.2.3.1
Fleet and Building Maintenance	Fleet Maintenance	4.2.6.2.3.2
	Outdoor Storage	4.2.6.2.3.2
	Road Salt Storage	4.2.6.2.3.2
	Snow Removal and Street Salting	4.2.6.2.3.2
	Street Sweeping	4.2.6.2.3.2
	Waste Transfer Station Management	4.2.6.2.3.2
	Waste Transfer Station Catch Basin Cleaning	4.2.6.2.3.3
	Municipal Parking Lot Sweeping	4.2.6.2.3.2
New Construction and Land Disturbance	Disposal of Construction Debris	4.2.6.2.3.1
	Erosion/Sediment Control	4.2.6.2.3.1
Storm Water System Maintenance	Disposal of Catch Basin Material	4.2.6.2.3.3
	Disposal of Street Sweepings	4.2.6.2.3.3
	Ditch Cleaning	4.2.6.2.3.3

Landscaping Chemical Usage

The Model Plan recommends that community employees engaged in landscaping activities should be properly trained in the proper use of landscaping chemicals. These employees include those from park and recreational departments, lawn maintenance workers, and roadside maintenance workers. The goal of the activity is to reduce chemical runoff to natural watercourses. This is accomplished by minimizing the use of herbicides, fertilizers, and insecticides to no more than the recommended levels. Communities can accomplish this by developing and instituting a chemical application training program for all employees who handle or apply landscaping chemicals. The Model Plan recommends that this training be initiated during 2003. All new employees should undergo the training before they are allowed to apply any landscaping chemicals.

It is recommended that the community maintain a record of the chemicals used and document where they were used and how they were applied including application rates. An annual report summarizing this information and the training given to employees should be maintained. A signed copy of the report should be forwarded to the community's Storm Water Coordinator.

Open Space Management

Park maintenance personnel are the primary employees affected by this activity. The objective is to reduce pollution and its effects by limiting maintenance operations near natural watercourses by leaving a buffer area that is natural and uncut. It also involves the encouragement of tree growth to enhance natural watercourse health.

It is recommended that the community develop a policy to protect and preserve open space buffer areas and to instruct park personnel to establish no-mow zones so as to allow trees and shrubs to reclaim disturbed stream banks. The policy should be developed and instituted in 2003. An annual report should be prepared to document stream bank areas that have been allowed to revert to a more natural state.

Leaf Recycling Program

This activity addresses the management of leave or yard waste recycling storage areas so as to insure that runoff from the storage area does not enter local stream either directly or through the storm sewer system. Runoff from storage areas should be directed to vegetated areas where it can be naturally filtered. Where this is not feasible, the runoff from uncovered storage areas should be captured into a sanitary sewer. The community should designate a person responsible for regularly inspected the recycling operation to insure its proper management. That person should submit an annual report documenting how well runoff was managed over the course of the year.

Fleet Maintenance

It is recommended that the community inventory all vehicle maintenance locations where the community's vehicles are maintained. The community should assess if stored products are protected from the elements and if they are adequately protected from spillage. The review of handling and disposal of waste products is another consideration of this activity. The goal is to reduce the wash off of pollutants from these facilities.

It is recommended that the community develop and implement a training program that addresses the proper methods of storing, handling, and disposing of vehicle maintenance materials. Maintenance sites should should be inspected and spill responses should should be documented. An annual assessment report should be prepared and forwarded to the community's Storm Water Coordinator.

Outdoor Storage

This activity targets the outdoor storage of materials such as sand and gravel and other bulk materials. The goal is to prevent stored materials or any pollutants associated with them from reaching local waterways. This is accomplished through a variety of means including covering stockpiles under a roof or tarp, diking storage areas to prevent runoff, or collecting the runoff and providing for its treatment. It is recommended that the community inventory all storage locations and assess the adequacy of the protection provided at existing storage areas. Any needed improvements should should be installed. An annual reporting of the status of runoff controls at storage locations should be compiled to document the effectiveness of control efforts.

Road Salt Storage

This activity targets the storage of road salt or other de-icing materials. The goal is to prevent runoff contaminated by stored salt from reaching local waterways. This is accomplished through a variety of means including covering stockpiles under a roof or tarp, diking storage areas to prevent runoff, or collecting the runoff and providing for its treatment. The community needs to inventory all storage locations and assess the adequacy of the protection provided at existing storage areas. Any needed improvements should be installed. An annual reporting of the status of runoff controls at storage locations should be compiled to document the effectiveness of control efforts. The Ohio Department of Transportation has developed guidance on proper storage practices. All communities that own or operate road salt storage facilities should follow this guidance.

Snow Removal and Street Salting

The objective of this activity is to reduce to the minimum amount necessary to maintain public safety the application of road salt on local streets. It is recognized that most communities already attempt to accomplish this objective. Road salt and its application is expensive and communities have programs in place to reduce this cost. Communities that already do have written policies that work to minimize salt application and provide regular training to all applicators will only have to document those policies and the training provided to employees. It is recommended that communities that do not have a written policy should develop and implement one by the end of 2003

Street Sweeping

Street sweeping can capture substantial amounts of solids and other pollutants form the surface of streets before they have a chance to be washed into the storm drainage system and discharged to local waterways. Many communities have sweeping programs in place. Other communities need to assess whether a sweeping program would be beneficial to their storm water management effort. The NOACA Model Plan recommends that communities continue their on-going effort until Ohio EPA identifies the need to develop an expanded program. Communities should track their sweeping

programs effectiveness by documenting the miles of streets swept annually and the pounds of material collected.

Waste Transfer Station Management

The objective of this activity is to insure that runoff from waste transfer stations is collected and conveyed to a treatment facility. Regular inspections of existing collection systems should be made so as to insure that runoff is not diverted to where it can be released to the environment. An annual assessment should be made to document any problems encountered and remediation actions taken.

Waste Transfer Station Catch Basin Cleaning

The objective of this activity is to insure that catch basin debris from waste transfer stations is collected and conveyed to a secure disposal facility. Regular inspections of existing collection systems should be made so as to assure that contaminated debris is not released to the environment. An annual assessment should be made to document any problems encountered and remediation actions taken.

Municipal Parking Lot Sweeping

Communities are encouraged to develop a sweeping program of its communally owned parking lots if one is not currently in place. Large parking lot runoff can be a significant source of automotive waste wash off. If a community has a street sweeping program in place, the sweeping of parking lots is a logical extension of that program. Each community will need to assess the feasibility and effectiveness of this activity for themselves. Where implemented, the community should document the areas swept and the volume of material collected.

Disposal of Construction Debris

This activity relates to the disposal of construction and demolition debris from community owned projects. Communities should already be disposing of these materials at approved disposal locations. It remains for them to simply document the types and quantities of materials generated and the disposal sites utilized.

Erosion/Sediment Control

Municipalities need to adhere to the same construction site soil erosion and sediment controls requiredof private developments. Communities that are engaged in construction projects on community owned lands should develop comprehensive soil erosion and sediment controls and assure that they are fully implemented. All construction related activities should be documented in an annual report prepared by the community engineer who should attest to the adequacy of the control programs used on the community's construction sites.

Disposal of Catch Basin Material

Catch basin cleaning is the responsibility of road maintenance departments. The materials removed from these basins have a significant pollution potential and must be properly handled and disposed of. Catch basins do should be cleaned on a regular basis so as to maintain their function, which is to remove solids washed off the street during rainfall or snowmelt events. If not maintained, these materials can be discharged to local waterways. The collected materials then must be transported to a secure disposal location. Communities need to review their existing catch basin cleaning programs and determine whether improvements can and should be made. All road maintenance personnel should be trained in proper collection, handling, and disposal methods. The community should document the amount of material collected annually and the method or place of disposal. Training programs should also be documented.

Disposal of Street Sweepings

Street sweeping is the responsibility of road maintenance departments. The materials swept up from streets have a significant pollution potential and must be properly handled and disposed of. The collected materials then must be transported to a secure disposal location. All road maintenance personnel should be trained in proper collection, handling, and disposal methods. The community should document the amount of material collected annually and the method or place of disposal. Training programs should also be documented.

Ditch Cleaning

In all areas where roadway runoff is conveyed in roadside ditches, a community will have to maintain those ditches. This entails cleaning accumulated materials out of the ditches on a regular basis. This material will consist of a mixture of solids washed off the road, of sediment washed into the ditch by overland runoff, litter, and vegetative material from plants growing in or near the ditch. This mixture must be properly handled and disposed of at a secure location. In addition, the cleaning method used must not allow for a soil erosion problem to de developed in the cleaned ditch. Each community that is involved in ditch cleaning projects should develop an environmentally protective cleaning program and instruct all road maintenance personnel in its implementation. An assessment of the community's effort should be made by the community engineer annually as the means to document the effects of on-going cleaning efforts and to look for areas that can be improved upon.

Section 3: Summary Table of Model Plan Recommendations
The following table details the recommendations of the Pollution Prevention/Good Housekeeping for Municipal Operations Minimum Measure Model Plan.