

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

**CONSTRUCTION SITE RUNOFF CONTROL
Minimum Measure
(Draft Ohio EPA MS4 General Permit Section 4.2.4)
Model Plan
Recommended Model Plan-Draft December 5, 2002**

Background

NOACA SWTF Construction Site Runoff/Post-Construction Management Work Group developed this Model Plan to assist communities in meeting the Construction Site Runoff Control requirements 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 Construction Site Runoff/Post-Construction Management Work Group utilized the Ohio EPA August 9, 2002 Draft MS4 (Municipal Separate Storm Sewer System) General Permit Section 4.2.4 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, implement, and enforce a program to reduce pollutants in any storm water runoff to your small MS4 from construction activities that result in a **land disturbance of greater than or equal to one acre**.

Requirement #1 – Establish an **ordinance** or other regulatory mechanism to **require erosion and sediment controls**, as well as sanctions to ensure compliance (Draft Ohio EPA MS4 Permit Section **4.2.4.1.1**).

Requirement #2 – Establish requirements for construction site operators to implement appropriate erosion and sediment control best management practices (**4.2.4.1.2**)

Requirement #3 – Establish requirements for construction site operators to **control waste such as discarded building materials, concrete truck washout, chemicals, litter, and sanitary waste** at the construction site that may cause adverse impacts to water quality (**4.2.4.1.3**)

Requirement #4 – Establish procedures for **site plan review** that incorporate consideration of potential water quality impacts **(4.2.4.1.4)**

Requirement #5 – Establish procedures for receipt and consideration of information submitted by the public **(4.2.4.1.5)**

Requirement #6 – Establish procedures for **site inspection and enforcement** of control measures **(4.2.4.1.6)**

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 Phase II Construction Site Runoff Control Minimum Control Measure.

The recommendations are broken down in accordance with the requirements of the Ohio EPA Phase II Regulations.

Requirement #1 – Establish an ordinance or other regulatory mechanism to require erosion and sediment controls, as well as sanctions to ensure compliance.

The NOACA SWTF has developed a model ordinance that can be used by local communities to meet this requirement. The model ordinance is titled: “Ordinance Controlling Construction Site Soil Erosion and Sediment”. Ohio EPA was engaged as part of the model development team to help insure that it is fully Phase II compliant. A Draft of this ordinance is available on NOACA’s web site (www.noaca.org).

The model ordinance is based on ordinances that are already actively being used in numerous communities across the region. The model is a derivation of an ordinance originally proposed by the Ohio Department of Natural Resources (ODNR) and the Ohio EPA. James Storer of the Natural Resource Conservation Service rewrote the ODNR/Ohio EPA model and provided details necessary to facilitate both the implementation of controls during construction and the maintenance of permanent controls following the completion of construction. The Chagrin River Watershed Partners (CRWP) reorganized the Storer model in order to make it more easily understood and to enhance its implementation. The NOACA SWTF modified the CRWP to account for Phase II requirements. The model ordinance incorporates a range of enforcement measures that communities can adapt to meet their specific needs. There are two versions of the Construction Site Erosion/Sediment Control section of the model ordinance: one is for communities that have significant new development and one is for those communities that are already largely developed.

The Model Plan for developing areas provides for the first time, a two-tiered building permit for residential development. This is done to help insure that construction sites are stabilized after major land disturbing activity is completed and before actual construction starts.

The model ordinance applies to all land disturbance activities that disturb one acre or more as required by the USEPA and Ohio EPA rules.

Requirement #2 – Establish requirements for construction site operators to implement appropriate erosion and sediment control best management practices.

The model ordinance permits a construction site operator to select the practices and methods that will work best to control erosion and sedimentation on any given construction site. The controls that the operator feels most comfortable with are the ones that are likely to get the job done best.

The Model Plan has identified a series of best management practices that are critical to insuring proper control of erosion and sedimentation on construction sites. It is a critical element of every construction site runoff control program to maximize the proper use of these practices on all construction sites. These critical BMPs include:

1. proper use and maintenance of silt fence;
2. the rigorous use of temporary seeding and mulching;
3. continuous inlet protection;
4. maintenance of protected construction entrances;
5. proper design and location of sediment basins; and
6. proper trench dewatering procedures.

The construction site runoff control program should be flexible enough to provide the construction site operator the ability to quickly make changes to the site plan during construction as conditions warrant. This allows the operator to account for unplanned occurrences that regularly occur on large construction projects due to conditions that are often beyond the control of the operator.

The Model Plan recommends ongoing training for developers, construction contractors and community site inspectors in the proper design, use, and maintenance of construction site runoff control practices.

The Model Plan recommends training of all personnel in a given community that are involved with construction site inspections. One goal of the training is to raise the awareness of inspectors as to the proper use of the priority erosion/sediment controls so that they can refer apparent problems at any site to the community engineer for action. The Model Plan also recommends that communities require developers to assure that supervisors for any permitted construction project are trained in proper erosion/sediment control. It is also recommended that site supervisors take part in the same training offered for community inspectors. Individual subcontractors should be encouraged to attend as well. This would

help the contractors to incorporate the proper use of erosion/sediment controls in their “means and measures of construction”, a policy that will increase compliance.

Requirement #3 – Establish requirements for construction site operators to control waste such as discarded building materials, concrete truck washout, chemicals, litter, and sanitary waste at the construction site that may cause adverse impacts to water quality.

The requirement to control wastes such as discarded building materials, concrete truck washout, chemicals, litter, and sanitary wastes have been included in the construction site permits issued by Ohio EPA since those permits were first issued. The same language used in the Ohio EPA permit has been incorporated into the model ordinance recommended for use by the NOACA SWTF. Communities that adopt one of the recommended ordinances will be compliant with this requirement.

Requirement #4 – Establish procedures for site plan review which incorporate consideration of potential water quality impacts.

USEPA notes that a pre-construction site plan review aids in the compliance and enforcement efforts since it alerts the community early in the process to the planned use and non-use of proper BMPs and provides a way to track new construction activities.

Communities are encouraged to seek assistance of their county SWCD or other appropriate public/private sources that are familiar with and trained in the proper use and maintenance of construction site BMPs to assist in the site plan review if they do not have such expertise on staff.

Site plan review provisions have been incorporated into the regional model ordinance. Adoption of the ordinance will meet this requirement.

Requirement #5 – Establish procedures for receipt and consideration of information submitted by the public.

USEPA requires the development of procedures for the receipt and consideration of public inquiries, concerns, and information submitted regarding local construction activities. This provision is intended to further reinforce the public participation component of the storm water program.

Communities are required only to consider the information submitted, and can exercise discretion as to appropriate follow-up. Communities are required to demonstrate acknowledgement and consideration of the information submitted. A simple tracking process is recommended in which information submitted is

recorded and given to the construction site inspector for possible follow-up will suffice.

The NOACA Model Plan recommends that communities report on follow-up actions to their local public involvement/public education committee. This will help to document responsiveness to public input and will help to familiarize the public with properly conducted construction activities.

Requirement #6 – Establish procedures for site inspection and enforcement of control measures.

USEPA notes that, once construction commences, BMPs should be in place and the communities' enforcement activities should begin. To ensure that BMPs are properly installed, the community is required to develop procedures for site inspection and enforcement of control measures to deter infractions. Inspections give the community an opportunity to provide additional guidance and education, issue warnings, and assess penalties. These inspections can be performed by the same inspectors that check compliance with health and safety building codes or by other appropriate individuals.

Community inspectors should concentrate on monitoring the critical BMPs identified under requirement 2 above. These are the controls that are most important on any construction site in the region.

The NOACA Model Plan has provided guidance related to the proper practices to be emphasized on single-lot building projects. These sites individually have a small potential for impact, but can require a disproportionate amount of inspection time. If builders and inspectors concentrate on the most important aspects of single-lot development, inspection resources can be prioritized to larger and potentially more problematic sites.

The Model Plan recommends that communities require monthly submission of the weekly inspection reports prepared by the developers of residential subdivisions and industrial/commercial sites. It is recommended that the community require the permittee for single lot residential projects submit copies of all inspection reports to the community engineer prior to receiving the permit that will allow for actual building to begin. Filing of inspection reports electronically could reduce the preparation time by the developer and facilitate community review and storage.

Section 3: SUMMARY TABLE OF MODEL PLAN RECOMMENDATIONS

The following table details the recommendations of the Construction Site Runoff Control Minimum Measure Model Plan.