Stormwater and the Construction Industry

**Protect Natural Features**

- Minimize clearing.
- Minimize the amount of exposed soil.
- Identify and protect areas where existing vegetation, such as trees, will not be disturbed by construction activity.
- Protect streams, stream buffers, wild woodlands, wetlands, or other sensitive areas from any disturbance or construction activity by fencing or otherwise clearly marking these areas.

**Construction Phasing**

- Sequence construction activities so that the soil is not exposed for long periods of time.
- Schedule or limit grading to small areas.
- Install key sediment control practices before site grading begins.
- Schedule site stabilization activities, such as landscaping, to be completed immediately after the land has been graded to its final contour.

**Vegetative Buffers**

- Protect and install vegetative buffers along waterbodies to slow and filter stormwater runoff.
- Maintain buffers by mowing or replanting periodically to ensure their effectiveness.

**Silt Fencing**

- Inspect and maintain silt fences after each rainstorm.
- Make sure the bottom of the silt fence is buried in the ground.
- Securely attach the material to the stakes.
- Don’t place silt fences in the middle of a waterway or use them as a check dam.
- Make sure stormwater is not flowing around the silt fence.

**Site Stabilization**

- Vegetate, mulch, or otherwise stabilize all exposed areas as soon as land alterations have been completed.

**Construction Entrances**

- Remove mud and dirt from the tires of construction vehicles before they enter a paved roadway.
- Properly size entrance BMPs for all anticipated vehicles.
- Make sure that the construction entrance does not become buried in soil.

**Slopes**

- Rough grade or terrace slopes.
- Break up long slopes with sediment barriers, or under drain, or divert stormwater away from slopes.

**Dirt Stockpiles**

- Cover or seed all dirt stockpiles.

**Storm Drain Inlet Protection**

- Use rock or other appropriate material to cover the storm drain inlet to filter out trash and debris.
- Make sure the rock size is appropriate (usually 1 to 2 inches in diameter).
- If you use inlet filters, maintain them regularly.

**Maintain your BMPs!**

www.epa.gov/npdes/menofbmps
Developing and Implementing a Plan

You must have a Plan that includes erosion and sediment control and pollution prevention BMPs. Three Plans require:

- Advance planning and training to ensure proper implementation of the BMPs
- Erosion and sediment control and pollution prevention BMPs
- Pollution prevention BMPs to reduce the construction site’s “closed-loop” procedure

Two phases of the construction project are responsible for complying with the permit requirements:

- Pollution prevention BMPs
- Erosion and sedimentation control BMPs

Program pollution prevention BMPs

Program erosion and sedimentation control BMPs

Prepare pollution prevention site map

Prepare erosion and sedimentation control plan

Erosion and sedimentation control plan

Erosion control and stormwater management plan

Water pollution control plan

1. Site Evaluation and Design Development

- Conduct site inventory
- Design site plan map

2. Assessment

- Mitigate the site area
- Determine the drainage areas
- Calculate the runoff coefficient

3. Control Selection and Plan Design

- Review and incorporate state or local requirements
- Select erosion and sediment controls
- Select other controls
- Select stormwater management controls

4. Program selection and program construction activity

5. Control Program implementation

6. Complete the Preliminary Stabilization and Termination

Final stabilization

Notice of Termination

Record retention

Maintenance of the Plan

7. Final stabilization

Maintain records of construction activities, including:

- Dates when construction activities temporarily cease on the site or portions of the site
- Completed activities

Maintenance of the Plan

Maintenance of the Plan

Erosion and sediment control practices are only as good as their implementation and maintenance.

Maintenance of the Plan

Maintenance of the Plan

Erosion and sediment control practices are only as good as their implementation and maintenance.

Maintenance of the Plan

Maintenance of the Plan

Erosion and sediment control practices are only as good as their implementation and maintenance.

Maintenance of the Plan

Maintenance of the Plan

Erosion and sediment control practices are only as good as their implementation and maintenance.

Maintenance of the Plan

Maintenance of the Plan

Erosion and sediment control practices are only as good as their implementation and maintenance.

Maintenance of the Plan

Maintenance of the Plan

Erosion and sediment control practices are only as good as their implementation and maintenance.

Maintenance of the Plan

Maintenance of the Plan

Erosion and sediment control practices are only as good as their implementation and maintenance.

Maintenance of the Plan

Maintenance of the Plan

Erosion and sediment control practices are only as good as their implementation and maintenance.

Maintenance of the Plan

Maintenance of the Plan

Erosion and sediment control practices are only as good as their implementation and maintenance.