Stormwater & the Construction Industry

Complying with State Permit Requirements & Implementing Erosion and Sediment Control BMPs



ALL CONSTRUCTION ACTIVITIES THAT DISTURB ONE ACRE OR MORE ARE REQUIRED TO OBTAIN A STATE STORMWATER PERMIT



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Changing the land from start to finish, must be guided by a Stormwater Pollution Prevention Plan.

So you know you need a NPDES permit... Now What?

- Obtain a copy of the Stormwater Pollution Prevention Plan (SWPPP) from the owner/design engineer
- Obtain a copy of the Notice of Intent (NOI) or permit application from the owner/design engineer or submit same to Florida Department of Environmental Protection (FDEP)
- Comply with the permit

Note: All construction activities that disturb **one or more acres are required** to be covered under a state-issued National Pollutant Discharge Elimination System (NPDES) permit **prior** to land disturbance.

If the project design engineer has prepared the NOI and SWPPP for you and has submitted the NOI to FDEP, skip to page 11 "Step 5. Implementing and Maintaining a Plan." You are only responsible to sign the certification, implement and maintain the Plan.

The information in this pamphlet should assist you in developing and implementing your SWPPP, and obtaining your NPDES permit.

If you don't have a NPDES permit...

Who obtains the permit?

Although the contractor may submit for the NPDES permit, typically the owner/operator or engineer that designed the project will submit the Notice of intent (NOI) and prepare the Stormwater Pollution Prevention Plan (SWPPP) for you.

Note: The NOI must be submitted at least 2 days prior to commencement of construction.

Responsibilities: What must I do as the contractor?

As the contractor you are required to <u>sign</u> a certification statement that says you <u>understand</u> the STORMWATER POLLUTION PREVENTION PLAN requirements and will <u>implement</u> the plan.

The SWPPP must clearly identify, for each measure specified in the plan, the contractor(s) and/or subcontractors that will implement the pollution control measure.

All contractors and subcontractors identified in the plan must sign a copy of the certification statement in Part V.D6b of the generic NPDES permit as follows:

"I certify under penalty of law that I understand, and shall comply with, the terms and conditions of the State of Florida Generic Permit for Stormwater Discharge from Large and Small Construction Activities and this Stormwater Pollution Prevention Plan prepared there under."

The certification must include the name and title of the person providing the signature, the name and address and telephone number of the contracting firm, and the date of the certification. Certifications must be signed in accordance with 62-620.305, F.A.C.

A copy of the NOI or letter from DEP confirming coverage under the generic permit must be posted at the construction site in a prominent place. In addition a copy of the NOI and SWPPP must be submitted to Brevard County if the construction is within the unincorporated County or if the site drains to a county maintained Municipal Separate Storm Sewer System (MS4).

Where a County building permit is required the NOI and SWPPP should be submitted to the Land Development Department. If a lot-clearing permit is required, submittal should be to the Office of Natural Resources Management. This submittal is for file record only, no review or approval will occur.

Discharges resulting from ground water dewatering activities at construction sites are not covered under this permit and must submit for coverage under the FDEP Generic Permit for the Discharge of Produced Ground Water from any Non-contaminated Site Activity pursuant to Rule 62-621.300(2), F.A.C. and/or St. Johns River Water Management District permit as appropriate.

The full text of the Generic Permit for Large and Small Construction Activities and required forms are available online at:

http://www.dep.state.fl.us/water/stormwater/npdes/permits_forms.htm

Steps To Develop a Stormwater Pollution Prevention Plan (SWPPP)

You must have a plan that includes erosion and sediment control and pollution prevention BMPs. The basic SWPPP principles are:

- Divert stormwater away from disturbed or exposed areas of the construction site.
- Install BMPs to control erosion and sediment and manage stormwater.
- Inspect the site regularly and properly maintain BMPs, especially after storm events.
- Revise the SWPPP as site conditions change during construction and improve the SWPPP if BMPs are not effectively controlling erosion and sediment.
- Minimize exposure of bare soils to precipitation.
- Keep the construction site clean by putting trash in trash cans, keeping storage bins covered, and sweeping up excess sediment on roads and other impervious surfaces.

Best Management Practices

A best management practice (BMP) is a method used to prevent or control stormwater runoff and the discharge of pollutants, including sediment, into local waterbodies.

Silt fences, inlet protection, and site stabilization techniques are typical BMPs on a construction site.

Your SWPPP should describe the planned BMP implementation on your construction site.

For guidance on creating a SWPPP see: http://www.dep.state.fl.us/water/stormwater/npdes/swppp.htm Since you are probably already implementing many of these BMPs on your construction sites, even creating a SWPPP and obtaining a permit should not be difficult or time-consuming. Follow these six simple steps....

1. Site Evaluation and Design Development

- Collect site information
- Develop site plan design
- Prepare a pollution prevention site map

The first step in preparing a Plan is to define the characteristics of the site. This involves collecting site information, identifying natural features that should be protected, developing a site plan design, describing the nature of the construction activity, and preparing a pollution prevention site map.



This creek flows along the edge of a construction site. Proper use of BMPs prevented the water from becoming silty and turbid.



Installing a silt fence around the perimeter of the project site is typically one of the first BMP's to implement

Shown above is a failing silt fence which is not keeping sediment from leaving the construction site.



An effective silt fence should be trenched, back filed and staked every three feet. Stakes should be driven at least eight inches into the ground.

2. Assessment

- Measure the site area
- Determine the drainage areas
- Calculate the runoff

The next step is assessing the impact the project will have on stormwater runoff. Determine the drainage areas and estimate the runoff amounts and velocities.



Rain coming down on the site will run off paved areas, and will carry pollutants such as soil, oil, yard debris, etc. The SWPPP should describe how the rain and the pollutants will be contained on the construction site.

3. Control Selection and Plan Design

- Review and incorporate state and local requirements
- Select erosion and sediment controls
- Select other controls
- Select stormwater management controls
- Indicate the location of controls on the site map
- Prepare an inspection and maintenance plan
- Coordinate controls with construction activity
- Prepare sequence of major activities

Saving trees and other ground cover material will serve to keep soil on the site.





uncovered can lead to erosion. causing sediment to enter surface waters during rain events.

In the third step, document your procedures to prevent and control stormwater runoff from leaving the site Outline areas that will not be disturbed, including critical natural areas, and also identify the measures (or BMPs) to be used to protect these areas. Phasing your project to minimize the amount of exposed soil at any given time is a highly effective way to prevent erosion.

No single BMP will meet all of the erosion and sedimentation control needs of a construction site. A combination of BMPs is necessary.

For more information on the types of BMPs appropriate for your construction site, see the BMP fact sheet series available at www.epa.gov/npdes/menuofbmps.



Keeping pollutants out of the path of stormwater can prevent pollution of surface waters.



Floating Turbidity barriers keep pollutants from discharging into surface waters.



Tracking soil off the construction site contributes to pollution as the soil travels with rain and wind.



A stone stabilized pad located at points of vehicular ingress and egress on constructio n sites reduce the amount of sediment transported to public roads by motor vehicles or runoff.

4. Certification and Notification

- Certify the Plan
- Submit the permit application

Once the Plan has been developed, an authorized representative must sign it. Now is the time to submit the permit application or notice of intent (NOI) to Florida Department of Environmental Protection.

Construction sites that discharge unpermitted stormwater are in violation of the Clean Water Act and may be subject to fines of up to \$27,500 a day per violation.

Brevard County's MS4 NPDES permit requires the submittal of a copy of the NOI and SWPPP to Brevard County prior to commencement of construction.

The NOI application can be obtained at: http://www.dep.state.fl.us/water/stormwater/npdes/permits_forms.htm

5. Implementing and Maintaining a Plan

- Implement controls
- Inspect and maintain controls
- Update/change the SWPPP as needed
- Report releases of hazardous materials

Erosion and sediment control practices are only as good as their installation and maintenance. The Florida Stormwater Erosion and Sedimentation Control Inspector Training and Certification Program information is available at:

http://www.dep.state.fl.us/water/nonpoint/erosion.htm

Train the contractors that will install the BMPs and inspect immediately to ensure that the BMPs have been installed correctly. Regularly inspect the BMPs (especially before and after rain events) and perform any necessary repairs or maintenance immediately.



Examples of BMPs: Silt fence on the left is a properly maintained silt fence. On the right is an improperly maintained silt fence. It does not prevent sediment from leaving the construction site. Below, storm drain on the left allows pollutants to enter. A prefabricated drop inlet external filter stops pollutants from entering the drain.



Important:

- 1. Keep records of BMP installation, implementation, and maintenance.
- 2. Keep track of major grading activities that occur on the site, when construction activities cease and when a site is temporarily or permanently stabilized.
- 3. If construction plans or BMPs change at any time, update the Plan accordingly.

Your permit requires that the SWPPP must be kept on site and available all times.

6. Completing the project: Final Stabilization and Termination of the Permit

- Final stabilization
- Notice of Termination
- Record Retention

Florida Department of Environmental Protection requires a Notice of Termination (NOT) signifying that the construction activity is completed. A NOT is required within 14 days of the following:

- ✓ Final stabilization has been achieved on all portions of the site for which the permittee is responsible.
- Another operator has assumed control over **all** areas of the site that have not been finally stabilized. This operator needs to submit a new permit application to the permitting authority.
- ✓ For residential construction only, temporary stabilization of a lot has been completed prior to transference of ownership to the homeowner, and the homeowner must be made aware of the need to perform final stabilization.

Permittees must keep a copy of their permit application and their Plan for at least 3 years following final stabilization.

Notes: