

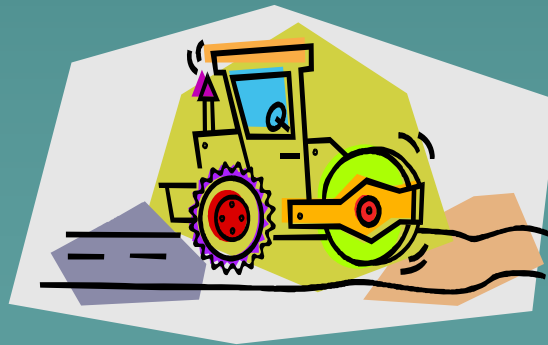
# Stormwater and Construction Activity New Regulations and Enforcement



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P&A

# Why Do EPA/DEP Care?

1. Soil and sediment runoff is a major cause of water quality problems and it reduces the depth of small streams, lakes and reservoirs.
2. How big of a problem is it?
3. What are the agencies planning to do about it?



# Current Regulatory Structure

## Construction Activity

- ◆ State of Florida Erosion and Sediment Control Designer and Reviewer Manual June 2007
- ◆ Brochure on the Florida NPDES Stormwater Permitting Program for Construction Activity
- ◆ EPA Stormwater Pollution Prevention Plans for Construction Activities
- ◆ EPA's Storm Water Management for Construction Activities: Developing Pollution Prevention Plans and Best Management Practices (10/01/92).

# Current System

**Large construction activity** is defined as activity that:

- Disturbs five acres or greater of land, or
- Disturbs less than five acres of land that is part of a larger common plan of development or sale that will ultimately disturb five acres or greater.

# Current System

**Small construction activity** is defined as activity that:

- ◆ Disturbs equal to or greater than one and less than five acres of land, or
- ◆ Disturbs less than one acre of land that is part of a larger common plan of development or sale that will ultimately disturb between one and five acres.
- ◆ **Disturbance** includes , but is not limited to soil disturbance, clearing, grading, and excavation.
- ◆ A **larger common plan of development or sale** is an area where multiple, separate, and distinct construction activities may be taking place at different times and at different schedules under one plan.

An **operator** is the entity that owns or operates the construction activity and that has authority to control those activities at the project necessary to ensure compliance with the terms of the permit.



- ◆ **The Construction General Permit**

- ◆ A **CGP Notice of Intent (NOI)** | Word (DEP Form 62-621.300(4)(b)) must be submitted online using Interactive Notice of Intent (iNOI) or by paper copy to the NPDES Stormwater Notices Center to obtain permit coverage.

- ◆ A **stormwater pollution prevention plan (SWPPP)** must be developed and implemented to be in compliance with the permit. See the CGP, as well as SWPPP guidance provided below, for details.

- ◆ State of Florida Erosion and Sediment Control Designer and Reviewer Manual June 2007

- ◆ Guidance & Template for Stormwater Pollution Prevention Plans

- ◆ EPA's Stormwater Pollution Prevention Plans for Construction Activities

- ◆ Storm Water Management for Construction Activities: Developing Pollution Prevention Plans and Best Management Practices (10/01/92).

- A **Notice of Termination (NOT)** | Word (DEP Form 62-621.300(6)) must be submitted online or by paper copy to the NPDES Stormwater Notices Center to discontinue permit coverage. Permit coverage may be terminated when the eligibility requirements for termination specified in the CGP are met.

# Stormwater Pollution Prevention Plans for Construction Activities

## Developing Your Stormwater Pollution Prevention Plan: A Guide for Construction Sites

- SWPPP Templates
- Sample Inspection Form

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<http://cfpub.epa.gov/npdes/stormwater/swppp.cfm#guide>

# So, what's new?

- ◆ The New Rule & It's Evolution

- ELG's and NSPS's

- ◆ Rule requires construction site owners and operators to implement a range of **erosion** and **sediment control** measures and **pollution prevention practices** to control pollutants in discharges from construction sites.



- ◆ The rule requires certain construction site owners and operators to sample stormwater discharges and comply with a numeric standard for the pollutant turbidity in these discharges starting in August of 2011.



- ◆ The final rule is intended to work in concert with existing state and local programs, adding a technology-based “floor” that establishes minimum requirements that apply nationally



- ◆ The rule requires all construction site owners and operators to implement a range of erosion and sediment control best management practices (BMPs) to reduce pollutants in stormwater discharges



- ◆ Permittees are also required to implement a range of pollution prevention measures to control discharges from activities such as dewatering and concrete washout.
- ◆ The rule contains stringent requirements for soil stabilization as well.



# Phased Approach to Numeric Limitations

- ◆ Construction sites that disturb 20 or more acres at one time:
  - conduct monitoring of discharges and comply with the numeric limitation beginning 18 months after the effective date of the final rule.
  - Beginning four years after the effective date of the final rule, the monitoring requirements and numeric limitation will apply to all sites that disturb 10 acres or more.

# Implementation

- ◆ The implementation date of the new requirements will vary depending on when states reissue their permits and whether projects are covered by individual or general permits



# Examples of New Requirements

## ◆ (a) Erosion and Sediment Controls.

– Design, install and maintain effective erosion controls and sediment controls to minimize the discharge of pollutants. At a minimum, such controls must be designed, installed and maintained to:

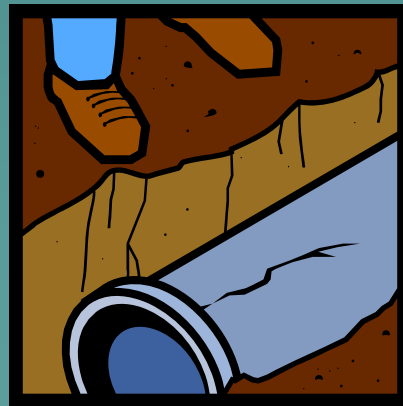
- ◆ (1) Control stormwater volume and velocity within the site to minimize soil erosion;
- (2) Control stormwater discharges, including both peak flow rates and total stormwater volume, to minimize erosion at outlets and to minimize downstream channel and streambank erosion;
- (3) Minimize the amount of soil exposed during construction activity;
- (4) Minimize the disturbance of steep slopes;

# Examples of New Requirements

- (5) Minimize sediment discharges from the site. The design, installation and maintenance of erosion and sediment controls must address factors such as the amount, frequency, intensity and duration of precipitation, the nature of resulting stormwater runoff, and soil characteristics, including the range of soil particle sizes expected to be present on the site;
- (6) Provide and maintain natural buffers around surface waters, direct stormwater to vegetated areas to increase sediment removal and maximize stormwater infiltration, unless infeasible; and
- (7) Minimize soil compaction and, unless infeasible, preserve topsoil.

- ◆ (b) **Soil Stabilization**. Stabilization of disturbed areas must, at a minimum, be initiated immediately whenever any clearing, grading, excavating or other earth disturbing activities have permanently ceased on any portion of the site, or temporarily ceased on any portion of the site and will not resume for a period exceeding 14 calendar days.
- ◆ **Stabilization must be completed within a period of time determined by the permitting authority**. In arid, semiarid, and drought-stricken areas where initiating vegetative stabilization measures immediately is infeasible, alternative stabilization measures must be employed as specified by the permitting authority

- ◆ (c) Dewatering. Discharges from dewatering activities, including discharges from dewatering of trenches and excavations, are prohibited unless managed by appropriate controls.



# Pollution Prevention Measures

- ◆ Design, install, implement, and maintain effective pollution prevention measures to minimize the discharge of pollutants. At a minimum, such measures must be designed, installed, implemented and maintained to:
  - (1) Minimize the discharge of pollutants from equipment and vehicle washing, wheel wash water, and other wash waters. Wash waters must be treated in a sediment basin or alternative control that provides equivalent or better treatment prior to discharge;

# Pollution Prevention Measures

- ◆ (2) Minimize the exposure of building materials, building products, construction wastes, trash, landscape materials, fertilizers, pesticides, herbicides, detergents, sanitary waste and other materials present on the site to precipitation and to stormwater; and
- ◆ (3) Minimize the discharge of pollutants from spills and leaks and implement chemical spill and leak prevention and response procedures.

- ◆ (e) Prohibited Discharges. The following discharges are prohibited: (1) Wastewater from washout of concrete, unless managed by an appropriate control; (2) Wastewater from washout and cleanout of stucco, paint, form release oils, curing compounds and other construction materials; (3) Fuels, oils, or other pollutants used in vehicle and equipment operation and maintenance; and (4) Soaps or solvents used in vehicle and equipment washing.

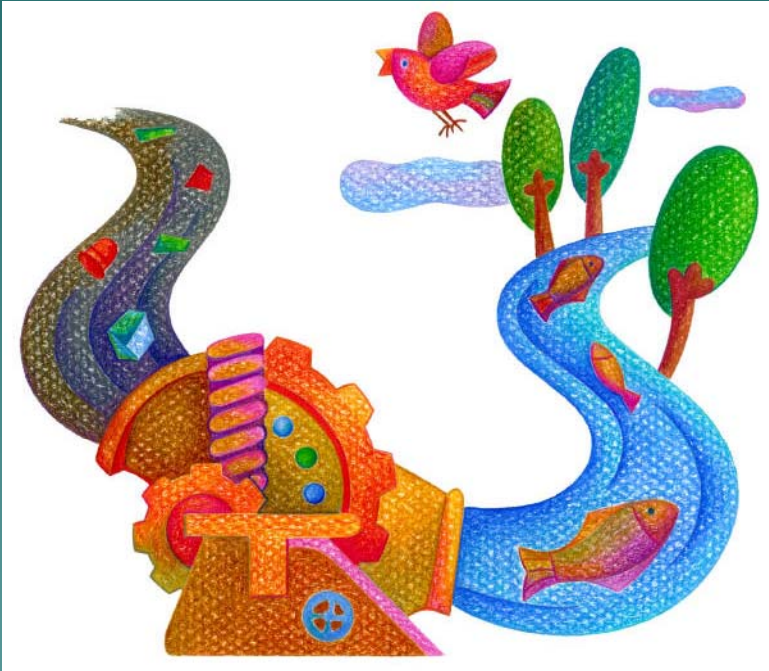
## ◆ (f) Surface Outlets

- When discharging from basins and impoundments, utilize outlet structures that withdraw water from the surface, unless infeasible.

# Numeric Limitations

- ◆ For all construction sites that disturb **20 or more acres** of land at one time (whether contiguous or not), the average turbidity for any discharge for any day may not exceed a numeric effluent limit of **280 NTU** (turbidity measurement units) – the deadline for complying with this numeric limit will be about August 2011 (40 CFR § 450.22(a));
- ◆ The **280 NTU** effluent limit is expanded to include all construction sites that disturb **10 or more acres** of land at one time (whether contiguous or not) in about January 2014;
- ◆ The turbidity effluent limit is limited to the 2-year, 24-hour storm event;
- ◆ As most states implement the federal stormwater rules, they will be responsible for establishing implementing the new regulations and standards.

- ◆ EPA expects compliance with the new regulation to **reduce** the amount of **sediment** and other **pollutants** discharged from construction and development sites by approximately **4 billion pounds per year**. EPA puts the annual **cost** of the rule at about **\$959 million**, once fully implemented.



## ◆ Key Resources

- Webcast: Construction SWPPPs from A to Z: Everything You Ever Wanted to Know and More! - This EPA webcast focuses on the key elements of developing an effective SWPPP and summarizes EPA's new SWPPP Guide for construction sites. This webcast also includes a discussion of common problems found during construction site inspections.

◆ **Webcast: Stormwater Phase II: Developing an Effective Municipal Stormwater Management Program For Construction Sites (Construction 101)**

- This EPA webcast reviews the basic elements necessary to build an effective municipal program for construction site stormwater management. It also discusses some of the basics of proper BMP implementation and how to conduct effective inspections.

◆ **Construction Industry Compliance Assistance Center** - Explanations of environmental rules for the construction industry. Links to stormwater permits and technical manuals for all 50 states.

- ◆ [National Menu of Best Management Practices for NPDES Stormwater Phase II](#) - The Construction Section of this Menu contains dozen of fact sheets on applicable construction site BMPs. Controlling stormwater runoff pollution requires a suite of BMPs working together and this Menu will help you determine which BMPs are most suitable for your site.
- ◆ [EPA's Construction General Permit](#) - If your construction site is located in an area where EPA is the [permitting authority](#), you may obtain NPDES permit coverage under this construction general permit (CGP). This page provides information on filing a Notice of Intent (NOI) and other helpful information and resources.
- ◆ [Managing Your Environmental Responsibilities: A Planning Guide for Construction and Development \(PDF\)](#) (255 pp, 2.3MB) - Produced by EPA, this document will help you comply with a variety of environmental regulations at every stage of your construction project.
- ◆ [International Erosion Control Association](#) - Non-profit educational organization working to educate and connect its membership of erosion and sediment control consultants, contractors, academics, corporations, and businesspersons. The website offers information on certifications for stormwater and erosion and sediment control professionals.
- ◆ [Certified Professional in Erosion and Sediment Control](#) - Certification program to become a recognized specialist in soil erosion and sediment control.