What is Phase II NPDES?¹

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Introduction

The National Pollutant Discharge Elimination System (NPDES) was first issued by the United States Environmental Protection Agency (USEPA) in 1990 under the Clean Water Act (CWA). This legislation addressed stormwater runoff from:

- “Medium” and “large” municipal separate (i.e., not combined with sanitary sewers) storm sewer systems (MS4s) generally serving populations of 100,000 people or greater.
- Construction activity disturbing 5 acres of land or greater.
- Ten categories of industrial activity.

Despite the significant improvements in the nation’s water quality in response to this and other efforts enacted under the CWA, degraded water bodies still exist. According to the 1996 National Water Quality Inventory, a biennial summary of state surveys of water quality, approximately 40% of surveyed U.S. water bodies were still impaired by pollution and did not meet water quality standards. In Florida 71% of streams, 80% of lakes and 31% of estuaries “potentially do not attain” their designated uses (2002, 305(b) State Water Quality Assessment Report). A leading source of this impairment is polluted runoff. According to the National Inventory, 13% of impaired rivers, 21% of impaired lake acres and 45% of impaired estuaries are affected by urban/suburban stormwater runoff and 6% of impaired rivers, 11% of impaired lake acres and 11% of impaired estuaries are affected by construction site discharges.

The Phase II program expands Phase I by requiring additional operators of MS4s in urban areas, and most industries and operators of small construction sites, to implement programs and practices to control polluted stormwater runoff through the use of NPDES permits.

Who oversees the program?

The USEPA is responsible for implementing the program, but in most cases, the USEPA has authorized individual states to administer the program in their own jurisdictions. In October 2000, the Florida Department of Environmental Protection (FDEP) was authorized to implement the program in the State of Florida.

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What Activities are regulated Under Phase II?

- **Industrial Activity**: Most industries that result in a discharge of stormwater to surface waters of the state or into a municipal separate storm sewer system (MS4), or that fall under any one of the 11 categories of industrial activities identified in 40 CFR 122.26(b)(14) are regulated. An exemption (except for construction activities) can be obtained if the facility operator can certify that all industrial materials and activities are protected by a storm-resistant shelter that prevents exposure to precipitation.

- **Construction Activities**: Any construction activities that disturb between 1 and 5 acres of land. (Land disturbance greater than 5 acres is still regulated under Phase I of the program.)

- **“Small” Municipal Separate Storm Sewer Systems (MS4s)** – Any MS4s that occur within urbanized areas as defined by the U.S. Bureau of the Census are automatically regulated. According to the Census, urbanized areas have a minimum residential population of 50,000 people and a minimum average density of 1,000 people/square mile. MS4s can also be designated for regulation by FDEP if they are located outside of urban areas but serve a population of at least 10,000 and have a population density of at least 1,000 people/square mile. The public may also petition FDEP to designate an MS4 to fall under the program.

What is required of a regulated source?

All regulated sources must obtain an NPDES stormwater permit (or exemption) from FDEP. These permits have different requirements depending on the regulated activity.

- **Industrial Activities**: Most industrial activities are already covered under the State of Florida Multi-Sector Generic Permit for Stormwater Discharge Associated with Industrial Activity (MSGP). However, they still need to:

  1. Submit an MSGP Notice of Intent to FDEP.
  2. Develop and implement a Stormwater Pollution Prevention Plan (SWPPP).
  3. Develop and implement an analytical stormwater monitoring and reporting program.

- **Construction Activities**: Prior to construction activity a regulated construction site must:

  1. Submit a notice of intent for Generic Permit for Stormwater Discharge from Construction Activities (CGP) to FDEP;
  2. Develop and implement a Stormwater Pollution Prevention Plan (SWPPP). This plan must in part include:
      a) a site evaluation of how and where pollutants may be mobilized by stormwater
      b) a site plan for managing stormwater runoff
      c) identification of appropriate erosion and sediment controls and stormwater BMPs
      d) a maintenance and inspection schedule
      e) a recordkeeping process
      f) identification of stormwater exit areas
  3. When the project is completed a Notice of Termination (NOT) must be submitted to DEP to discontinue permit coverage. A NOT may be submitted only when the site meets the eligibility requirements for termination specified in the CGP.

- **Municipal Separate Stormwater Sewer Systems (MS4s)**: Regulated small MS4 operators must develop and implement a stormwater management program that includes measurable goals and best management practices of their choosing for the following six minimum control measures:
1. *Public Education and Outreach:* Perform educational outreach and distribute materials regarding the harmful impacts of polluted stormwater runoff.

2. *Public Participation/Involvement:* Comply with state and local public notice requirements and encourage other avenues for citizen involvement in the program.

3. *Illicit Discharge Detection and Elimination:* Implement a plan to detect and eliminate any non-stormwater discharges to the MS4 and create a system map showing all outfall locations.

4. *Construction Site Runoff Control:* Implement and enforce an erosion and sediment control program for construction activities.

5. *Post-construction Runoff Control:* Implement and enforce a program to address discharges of post-construction stormwater runoff from new development and redevelopment activities.

6. *Pollution Prevention/Good Housekeeping:* Implement a program to prevent/reduce pollutant runoff from municipal operations and property and conduct employee pollution prevention training.

**What is the timeline for rule implementation?**

Initial implementation of NPDES Phase II under a fast-track adoption would have required notice of intentions by regulated facilities to be submitted by March 10, 2003. Due to a legislative objection to this fast-track option, implementation of Phase II rules was delayed and became effective May 1, 2003.

**Additional sources of Information**

FDEP Phase II Website
http://www.dep.state.fl.us/water/stormwater/npdes/index.htm

USEPA Phase II Website
http://cfpub.epa.gov/npdes/home.cfm?program_id=6

US Census bureau urban area designations
http://www.dep.state.fl.us/water/stormwater/npdes/census.htm

2002 Florida 305(b) Water Quality Report
http://www.dep.state.fl.us/water/docs/2002_305b.pdf

Archival copy: for current recommendations see http://edis.ifas.ufl.edu or your local extension office.