

# Boston College

Office of Environmental Health and Safety

## The Environmental Protection Agency's (EPA) - Storm Water Construction Program

### Introduction

The Clean Water Act (CWA), prohibits the discharge of any pollutant to navigable waters of the United States from a point source unless the discharge is authorized by a National Pollutant Discharge Elimination System (NPDES) permit. Efforts to improve water quality under the NPDES program traditionally focused on reducing pollutants in industrial process wastewater and municipal sewage treatment plant discharges. Over time, it has become evident that more diffuse sources of water pollution, such as storm water runoff from construction sites, are also significant contributors to water quality problems.

Sediment runoff rates from construction sites are typically 10 to 20 times greater than those from agricultural lands, and 1,000 to 2,000 times greater than those of forest lands. During a short period of time, construction activity can contribute more sediment to streams than can be deposited over several decades, causing physical and biological harm to our Nation's waters. In 1990, EPA promulgated rules establishing Phase I of the NPDES storm water program. Phase I addresses, among other discharges, discharges from large construction activities disturbing 5 acres or more of land, or smaller sites that are part of a larger common plan of development where there is a cumulative disturbance of at least 5 acres.

[Phase II of the NPDES storm water program covers small construction activities disturbing between 1 and 5 acres and will be *effective March 10, 2003*. Site activities disturbing less than 1 acre will also be regulated as small construction activity as part of Phase II if activities are part of a larger common plan of development or sale with a planned disturbance of equal to or greater than 1 acre and less than 5 acres, or if designated by EPA.]

### Applicable Regulation

EPA 40 CFR Parts 9, 122, 123, 124. National Pollutant Discharge Elimination System General Permits for Storm Water Discharges From Construction Activities.

Special Requirements for the State of Massachusetts may also apply when construction related activities affect

polices under the Massachusetts Clean Waters Act and Wetlands Protection Act.

Other regulations that *may* apply are:

Department of Environmental Protection– Dewatering Permit for construction sites  
Massachusetts Environmental Protection Agency Review

### Summary of Requirements

Any construction activity, including grading, clearing, excavation, or other earth moving process may require an NPDES storm water permit for construction. Construction activity is one of eleven industrial activities that may require a Phase I NPDES permit. The general NPDES permit program is generally used for construction projects and only allows for storm water discharge associated with construction activities.

Steps to obtain coverage under the General Permit are as follows:

- Review EPA's Construction General Permit fact sheet and permit requirements.
- Develop and implement a Storm Water Pollution Prevention Plan (SWPPP) that includes pollution prevention Best Management Practices.

#### Recommended Best Management Practices (BMPs)

As is the case with all construction sites, erosion and sediment control is best accomplished with proper planning, installation, and maintenance of controls. The following practices have shown to be efficient, cost effective, and versatile for site operators to implement. The practices are divided into two categories: non-structural and structural.

##### Non-Structural BMPs

- Minimizing Disturbance
- Preserving Natural Vegetation
- Good Housekeeping

##### Structural BMPs

###### Erosion Controls

- Mulch
- Grass
- Stockpile Covers

###### Sediment Controls

- Silt Fence
- Inlet Protection
- Check Dams
- Stabilized Construction Entrances
- Sediment Traps

Most erosion and sediment controls require regular maintenance to operate correctly. Accumulated sediments should be removed frequently and materials should be checked periodically for wear. Regular inspections by qualified personnel, which can allow problem areas to be

addressed, should be performed after major rain events.

- Complete and submit a Notice of Intent (NOI) to EPA at least two days prior to the commencement of construction activity.
- The EPA NOI processing center will send the permittee a permit number OR, the Regional Director may deny the NOI and require submittal of an Individual Permit. *The process for obtaining an Individual Permit is not covered in this document.*

## **Training**

Review of this Factsheet is recommended for management and facility personnel who are responsible for construction activities. Contact EH&S for case-by-case review of permitting applicability and assistance with specific permitting requirements

## **Reporting**

1. Submission of a **NOI** that includes general information and a certification that the activity will not impact endangered or threatened species.
2. The development, implementation and continued maintenance of a **SWPPP** with appropriate BMPs to minimize the discharge of pollutants from the site; and **Pollutants of concern** include sediment or a parameter that addresses sediment (such as total suspended solids, turbidity, or siltation) and any other pollutant that has been identified as a cause.
3. Submission of a **Notice of Termination** (NOT) when final stabilization of the site has been achieved as defined in the permit or when another operator has assumed control of the site.

## **Recordkeeping**

1. The NOI with all records of data used to complete the NOI.
2. The SWPPP including appropriate signature of duly authorized representative.
3. A Notice to be posted near the main entrance of the site with the following info: the NPDES permit number, name and telephone of local contact person, brief description of the project, location of SWPPP.
4. Other information required by the permit and all supporting documentation.

5. Records must be kept for a minimum of three years after site stabilization.

## **Written Program**

A SWPPP shall be written for either the entire site or individual construction projects that fall under the requirements of this Permit. The SWPPP shall include a site description, controls, maintenance, inspection procedures and pollution prevention measures for non-storm water components.

## **University Resources**

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