The Permit (cont.)

How can sites be designed to reduce pollution after construction is completed?

After construction is complete, a site's long-term impact on stormwater quality also needs to be considered. Preventing stormwater pollution starts with good site design. Local governments should encourage land developers to use site designs that decrease stormwater runoff volume and contamination. Low Impact Development (LID) is a relatively new concept for stormwater management that uses site designs aimed at minimizing hydrological and environmental impacts associated with land development. It emphasizes dealing with stormwater close to where it falls, using management techniques such as infiltration and pollution prevention rather than construction of large collection, conveyance, and storage systems. This approach provides significant protection to surface waterbodies and helps to reduce the size and frequency of flood events. Coupled with Smart Growth approaches—which look at growth and development on a broader scale—your community could reap water quality and quantity benefits at both the local and watershed scale.

Local Programs

Relationships

Due to the large number of active construction sites, our success in addressing complex and challenging stormwater impacts to our nation's waters depends on effective cooperation among all levels of government, including local (county, parish, municipal, city, town, district), state, and federal authorities.

Approximately 6,000 local governments across the country operate municipal separate storm sewer systems (MS4s) that are required to develop programs to oversee construction projects. A key objective of these programs is to ensure that construction site operators eliminate or minimize the volume of stormwater and the discharge of pollutants, including sediment, to the MS4 and, ultimately, to local waterbodies. Local governments are required to review and approve erosion and sediment control plans and to conduct inspections of construction sites to ensure compliance with local requirements.

How do federal NPDES requirements relate to local requirements?

Many local governments have their own requirements for construction sites (erosion and sediment controls, clearing and grading requirements, stormwater, etc.). Construction site operators are encouraged to use materials, such as erosion and sediment control plans, that can satisfy both local and NPDES requirements. Operators must also understand that compliance with local requirements does not equal compliance with NPDES requirements, or vice-versa, unless the local program has been designated by the U.S. Environmental Protection Agency (EPA) as a *Qualifying Local Program.*

Qualifying local programs

If a community has a strong erosion and sediment control program, EPA may designate it as a *Qualifying Local Program*. In these cases, construction site operators would follow the local requirements. A qualifying local erosion and sediment control program must have equivalent provisions to EPA's NPDES program, including requirements for:

- Appropriate erosion and sediment control BMPs
- Control of other construction site wastes
- Development and implementation of a SWPPP
- Review of the erosion and sediment control portion of the SWPPP
- Inspection of construction activities
- Other NPDES requirements applicable to the municipality

Municipal stormwater managers are encouraged to work with their EPA Regional Office to learn more about how to be designated as a qualifying local program. You can find your EPA Regional Stormwater Coordinator at **www.epa.gov/npdes/stormwater**

A LOCAL GOVERNMENT'S GUIDE

Construction Stormwater Resources

- **Environmental Protection Agency (EPA) Stormwater Website**
  EPA's website contains links to information such as the Construction General Permit (CGP), frequently asked questions, downloadable publications that you may easily reproduce, and SWPPP guidance and training information at **www.epa.gov/npdes/stormwater/construction**

- **Construction Industry Compliance Assistance Center**
  This is a free environmental compliance assistance website for contractors, builders, and developers. It was developed with EPA grant funds and construction industry trade organization guidance. It features concise explanations about stormwater and other environmental requirements, links to state permitting authorities, and links to some of the best guides from industry, federal and state government, and nonprofits, including EPA's comprehensive new compliance guide: *Managing Your Environmental Obligations, A Planning Guide for Construction and Development* at **www.CICACenter.org/stormwater**

- **Stormwater Manager's Resource Center**
  The Stormwater Manager's Resource Center (SMRC) is designed specifically for stormwater practitioners, local government officials, and others who need technical assistance on stormwater management issues. Created and maintained by the Center for Watershed Protection, the SMRC has everything you need to know about stormwater in a single site at **www.stormwatercenter.net**

  Also visit the **Center for Watershed Protection's** main website at **www.cwp.org**

- **EPA's Low Impact Development Website**
  The EPA's LID website provides information and links to information about Low Impact Development ideas and techniques at **www.epa.gov/owow/nps/lid**

- **Smart Growth**
  EPA's **Smart Growth** Webpage contains guidance documents, tools and resources for understanding and applying smart growth ideas to urban planning at **www.epa.gov/smartgrowth**

  The **Smart Growth Network** is a partnership organization dedicated to raising public awareness of how growth can improve community quality of life. The Network seeks to promote smart growth best practices, develop and share information, innovative policies, and tools and ideas and to cultivate strategies that address barriers to and advance opportunities for smart growth at **www.smartgrowth.org**

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EPA United States Environmental Protection Agency

Getting the Word Out...

The Role of Local Governments In Implementing the NPDES Stormwater Program for Construction Sites

Background

What are the problems and solutions associated with stormwater runoff?

Why should we be concerned about stormwater runoff?

Runoff from rainstorms and snowmelt is the most significant source of water pollution today. Stormwater carries sediment, oil, grease, nitrogen, phosphorus, and other pollutants into storm drains and then, *untreated*, into nearby waterbodies. Because most stormwater drainage systems provide no treatment, preventing contamination of stormwater is crucial to ensure that pollutants are not released into the environment. Municipal drinking water systems may face higher costs if they must treat water contaminated by stormwater runoff. Improperly managed stormwater runoff is also a leading cause of flooding, which can lead to property damage, cause road safety hazards, and clog catch basins and culverts with sediment and debris. Sediment in waterways can impede navigation and require expensive dredging.

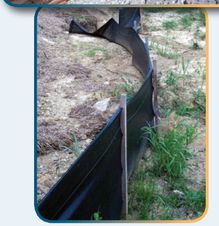
How does runoff degrade rivers, lakes and coastal waters?

Today, natural areas are being replaced by impervious surfaces, like roads, parking lots, and buildings. This transformation can significantly impact waterbodies. Natural areas allow rain and snowmelt to easily infiltrate into the ground. Impervious surfaces, on the other hand, significantly increase the volume and velocity of runoff and the amount of pollutants in stormwater. Fast-flowing water erodes stream banks, enlarges stream channels and releases sediment. Research indicates that stream quality begins to decline when impervious surfaces cover just 10 percent of a watershed.

Sediment fills the spaces between rocks where fish spawn and aquatic organisms live. It scours streambeds and stream banks, causing additional erosion. Excess nutrients in runoff, especially nitrogen and phosphorus, cause waterbody-impairing algal blooms. As algae die and decompose, oxygen levels decrease, harming or killing fish, plants and other aquatic organisms. Sediment and algal blooms can also prevent sunlight from penetrating deeper waters, killing the plants that provide habitat and food for aquatic organisms.

What can be done to reduce these pollutants from construction activities?

If construction sites are not properly managed, large amounts of soil will be washed away during rainstorms. To protect water quality, runoff and soil erosion should be controlled by using techniques called Best Management Practices (BMPs).



BMPs can reduce construction-related pollution by:

- Minimizing land clearing to preserve natural vegetation and other natural features
- Managing clearing and grading in phases to minimize the amount of bare soil exposed at any given time
- Building and maintaining proper site entrances (to prevent sediment from being tracked onto streets and, ultimately, washed into storm sewers)
- Stabilizing steep slopes
- Installing sediment trapping devices and perimeter controls like silt fences and sediment basins
- Stabilizing areas as soon as possible after land-disturbing activities

Other BMPs involve good housekeeping measures, like picking up site debris, cleaning vehicles in designated washing areas, and educating construction workers about the stormwater program and pollution prevention techniques. Correctly using BMPs during construction improves water quality by greatly reducing the quantity of pollutants exiting the site. Using a single control measure, such as a silt fence, is rarely adequate. To be most effective, BMPs should be used in combination.

To get more detailed information, visit U.S. Environmental Protection Agency (EPA)'s website (www.epa.gov/npdes/menuofbmps) on best management practices.

The Issue

How can you help?

What's the issue?

Under the Clean Water Act, new regulations require many construction sites in your community to obtain National Pollutant Discharge Elimination System (NPDES) permit coverage for stormwater runoff. These permits require operators of these sites to implement steps to prevent sediment and other pollutants from washing off into nearby streams, rivers, lakes, and coastal waters.

Many involved in the construction industry are unaware of these new requirements or don't understand them. **Local governments are uniquely positioned to play an important role by providing information to people in the construction industry who might need NPDES permit coverage.**

You can help by distributing the U.S. Environmental Protection Agency (EPA)'s brochure entitled *Does Your Construction Site Need a Stormwater Permit?* to builders who may need to apply for coverage under EPA's *Construction General Permit* (CGP). This brochure is available online **(www.epa.gov/npdes/stormwatermonth)**.

Your municipality is in a state where EPA is the permitting authority (many states operate the NPDES permitting program under delegated authority). Therefore, operators of construction sites in your area that meet the requirements described below must obtain permit coverage from EPA.

This guide provides local government officials with background information on EPA's stormwater permitting requirements for construction sites. For additional resources, such as guidance documents, contact lists, and outreach materials, visit EPA's NPDES stormwater website **(www.epa.gov/npdes/stormwater/construction)**.

What does "*permit coverage*" mean?

EPA issues something called a *general permit* for construction activities. This *umbrella* permit covers all construction and land disturbing activity in certain states, (EPA is the permitting authority for several states, including yours). Each operator of a construction site then applies for coverage under this broad general permit.

Many people are familiar with local building permits—someone files an application with a local government office, and that office issues a permit. Unlike this process, NPDES permits for construction activities are issued first, and then individuals apply for coverage under the existing permit. **It is important that construction site operators obtain and read a copy of the Construction General Permit *before* applying for permit coverage.**

What activities need stormwater permit coverage?

- Generally, operators of construction sites disturbing one or more acres of land will need NPDES permit coverage for their stormwater discharges.
- Operators of smaller sites that are part of a larger, common plan of development that disturbs a total of more than one acre of land will also generally need NPDES permit coverage for their stormwater discharges (for example, someone building a single house on a half-acre lot in a ten-acre planned development would likely need NPDES permit coverage.)

Permitting Authority

EPA is the permitting authority in Alaska, the District of Columbia, Idaho, Massachusetts, New Hampshire, New Mexico, Puerto Rico, most Indian Country Lands, U.S. territories (e.g. Guam, American Samoa) except the Virgin Islands, and for federal facilities in Vermont, Colorado, Washington, and Delaware.

Who needs coverage under a stormwater permit?

The operator of a construction site is responsible for obtaining NPDES stormwater permit coverage. EPA's *Construction General Permit* defines *operator* as any party that has:

- Operational control over the construction plans and specifications

  and/or

- Day-to-day operational control of the site

The term *operator* may include owners, general contractors, or independent subcontractors. Operators may be corporations, government officials, or private citizens. There may be several entities at a site that meet the definition of operator, and all must obtain coverage under EPA's CGP. For more information, visit **www.epa.gov/npdes/cgp** and see Section 3 and Appendix A of EPA's CGP.

Local governments will also need to apply for NPDES permit coverage when their own projects disturb more than one acre (for example, construction of a new municipal building, park, etc.).

The Permit

What do construction site operators need to do?

- **Obtain, read, and understand the U.S. Environmental Protection Agency (EPA)'s Construction General Permit.**
- **Develop a SWPPP**

  A stormwater pollution prevention plan (SWPPP) is a written document that lists the potential sources of stormwater pollution, describes practices that will be used to reduce pollutants, and helps assure compliance with the terms and conditions of the Construction General Permit (CGP). EPA does not require that operators formally submit their SWPPPs for approval. They must be kept on the construction site and made available to government officials and the public upon request.

  The operator(s) must do the following:

  - Gather basic information about the site, such as:
    - Site description (including a map of existing site conditions, soils information, slopes, the name and location of nearest receiving water, rainfall data, natural features that should be protected, etc.).
    - Description of planned activity (including a map of where those activities are to take place, the sequence of events, etc.).
  - Ensure the protection of endangered species and critical habitat. (Operators should also understand and comply with historic preservation requirements under relevant federal, state, and Tribal laws.)
  - Select a suite of BMPs to eliminate or minimize the impact of stormwater runoff from each part of the site. These BMPs should be designed to minimize runoff volume, velocity, and contaminants.

Remember: Many local governments already require operators of construction projects to install erosion and sediment control BMPs. EPA's CGP also requires operators of construction sites to address other potential sources of stormwater pollution. Operators must implement appropriate BMPs to minimize the potential for spills of materials such as fuels and hazardous liquids and to control construction site wastes, trash, concrete and paint washout, etc.

  - Implement and maintain the BMPs. The operator must regularly inspect BMPs to ensure their proper functioning and, if needed, correct any problems. Inspections and maintenance of BMPs should be documented in the SWPPP along with updates to plans, designs, and schedules.

  For more information on how to develop a SWPPP, construction site operators can visit EPA's website **(www.epa.gov/npdes/stormwater/swppp)**.

- **Consult with municipal and county authorities to ensure compliance with local requirements**
- **Obtain permit coverage:** To obtain permit coverage, the operator(s) submits a form called a Notice of Intent (NOI) to EPA. EPA has developed an online permit application system called "eNOI" **(www.epa.gov/npdes/enoi)**, which is the fastest and easiest way to get permit coverage. Coverage under EPA's Construction General Permit requires a 7-day waiting period after a Notice of Intent is filed and posted before construction may begin. To check the status of an NOI, visit the EPA website **(www.epa.gov/npdes/noisearch)**.
- **Implement the SWPPP:** Before construction begins, the operator must implement the SWPPP. Be sure to maintain all BMPs during each stage of the project.