

# **Small Construction Program Overview**



This fact sheet provides an overview of the construction stormwater requirements for small sites, typically between 1 and 5 acres in size, that require coverage under a National Pollutant Discharge Elimination System (NPDES) permit. Stormwater runoff from construction sites is a significant contributor 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.

Office of Water (4203)

# **Construction Stormwater Regulations**

Generally, stormwater discharges from construction sites disturbing 1 acre or more, or less than 1 acre but are part of a larger common plan of development or sale that will ultimately disturb 1 acre or more (including borrow and material storage areas) need an NPDES permit. EPA has promulgated several rules that regulate large construction, small construction, erosion and sediment control and pollution prevention, described below.

### **Phase I Rule – Large Construction**

In 1990, EPA promulgated rules establishing Phase I of the NPDES stormwater program. Phase I identifies eleven categories of industrial activity in the definition of "stormwater discharges associated with industrial activity" that must obtain an NPDES permit. Category (x) of this definition includes stormwater discharges from construction activity. Under category (x), the Phase I rule requires all operators of construction activity disturbing 5 acres or greater of land, and construction activity disturbing less than 5 acres but is part of a "larger common plan of development or sale" with a planned disturbance of 5 acres or greater to obtain NPDES permit coverage. The types of disturbances regulated include clearing, grading, and excavating from such projects as road building, construction of residential houses, office buildings, industrial sites, or demolition.

## Phase II Rule – Small Construction

In 1999, EPA finalized Phase II of the NPDES stormwater program which covers stormwater discharges from small construction activities. The Phase II rule requires all operators of construction activity disturbing 1 acre or greater but less than 5 acres, and construction activity disturbing less than 1 acre but is part of a "larger common plan of development or sale" with a planned disturbance of 1 acre or greater to obtain NPDES permit coverage. The state NPDES permitting authority or EPA may designate construction activities disturbing less than 1 acre based on the potential for contribution to a violation of a water quality standard or for significant contribution of pollutants to waters of the United States.

## **Construction and Development (C&D) Rule**

In 2009, EPA published effluent limitations guidelines (ELGs) for the construction and development (C&D) industry (revised in 2014), which established both erosion and sediment control and pollution prevention requirements for stormwater discharges from all regulated construction activities.

### What Is Meant by a "Larger Common Plan of Development or Sale?"

As defined in EPA's NPDES Construction General Permit (CGP) for stormwater discharges, a "larger common plan of development or sale" means a contiguous area where multiple separate and distinct construction activities may be taking place at different times on different schedule under one common plan (e.g., the operator is building on three half-acre lots in a 6acre development). The "common plan" in a common plan of development or sale is broadly defined as any announcement or piece of documentation (including a sign, public notice or hearing, sales pitch, advertisement, drawing, permit application, zoning request, computer design, etc.) or physical demarcation (including boundary signs, lot stakes, surveyor markings, etc.) indicating that construction activities may occur on a specific plot.

#### What Is the Definition of an "Operator" of a Construction Site?

As defined in EPA's CGP, an "operator" is any party associated with a construction project that meets either of the following:

- The party that has operational control over construction plans and specifications, including the ability to make modifications to those plans and specifications; *or*
- The party that has day-to-day operational control of those activities at a construction project that are necessary to ensure compliance with the permit conditions.

There may be more than one party at a site performing the tasks related to "operational control" as defined above. Depending on the site and the relationship between the parties (e.g., owner, developer, contractor), there can either be a single party acting as site operator and consequently be responsible for obtaining permit coverage, or there can be two or more operators, all obligated to seek permit coverage. Under EPA's CGP, where there are multiple operators associated with the same project, all operators must obtain permit coverage. It is important to note that NPDES-authorized states may use a different definition of "operator" than the one above.

# Are Waivers from the NPDES Program Available for Operators of Regulated Construction Activity?

Yes, but only for small, not large, construction activity. Under the Phase II rule, NPDES permitting authorities have the option of providing three types of waivers from the NPDES requirements for operators of small construction activity:

#### 1. Rainfall Erosivity Waiver (also known as the "Low Erosivity Wavier (LEW)")

The value of the rainfall erosivity factor ("R" in the Revised Universal Soil Loss Equation [RUSLE]) is less than 5 during the period of construction activity (See Fact Sheet 3.1), meaning there is low predicted rainfall potential.

#### 2. TMDL Waiver

A determination that stormwater controls are not necessary based on a "total maximum daily load" (TMDL) that addresses the pollutant(s) of concern for construction activities.

#### 3. Equivalent Analysis Waiver

For non-impaired waters that do not require a TMDL, an equivalent analysis that determines allocations for small construction activities for pollutant(s) of concern or that determines allocations are not needed to protect water quality based on consideration of in-stream concentrations, expected growth in pollutant concentrations from all sources, and a margin of safety.

The intent of the waiver provisions is to provide a waiver from NPDES permitting for only those sites that are highly unlikely to have an adverse impact on water quality. Factors that may be relevant to the permitting authority include the site's proximity to receiving waters and the sensitivity of receiving waters.

**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 of impairment of a receiving waterbody.

## What is "R" in the Rainfall Erosivity Waiver?

The Rainfall Erosivity Waiver uses the Rainfall Erosivity Factor, "R," to determine whether the potential for polluted discharge is low enough to justify a waiver from the requirements. "R" is one of six variables used by the Revised Universal Soil Loss Equation (RUSLE)—a predictive tool originally used to measure soil loss from agricultural lands at various times of the year on a regional basis—to predict soil loss from construction sites. The Rainfall Erosivity Wavier is time-sensitive and is dependent on when during the year a construction activity takes place, how long it lasts, and the expected rainfall and intensity during that time. For information about the Rainfall Erosivity Waiver, see Fact Sheet 3.1. A Rainfall Erosivity Factor calculator for small construction sites is available at <u>https://lew.epa.gov/</u>.

### What is a "TMDL" in the TMDL Waiver?

For impaired waters where technology-based controls required by NPDES permits are not achieving state water quality standards, the CWA requires implementation of the TMDL process. The TMDL process establishes the maximum amount of pollutants a waterbody can assimilate before water quality is impaired, then requires that this maximum level not be exceeded.

A TMDL is calculated for each pollutant that is found to be contributing to the impairment of a waterbody or a segment of a waterbody. To allow a waiver for any small construction project that discharges to an impaired water for which a TMDL has been established or approved by EPA, the applicable TMDL would need to have addressed sediment, or a parameter that addresses sediment such as total suspended solids, turbidity, or siltation, or any other pollutants (e.g., oil and grease, temperature) that have caused the impairment that are associated with the construction activity.

# How Would an Operator Qualify for, and Certify to, the TMDL or Equivalent Analysis Waiver?

If an EPA-approved or established TMDL for sediment or other pollutants associated with construction activity indicates that controls for stormwater discharges from construction activities (specifically small construction sites) are not needed in order for the impaired water to meet water quality standards, then the operator of a small construction project in the same watershed may be eligible to seek a waiver from the requirement to be covered by an NPDES permit. Similarly, for non-impaired waters, if an equivalent analysis is developed that determines allocations for sediment or other pollutant(s) of concern associated with small construction sites are not needed to protect water quality, the operator may be eligible for an NPDES permit waiver. The equivalent analysis must be based on existing in-stream concentrations, expected growth in pollutant concentrations from all sources, and a margin of safety. To complete the waiver approval, a certification form will likely be provided by the NPDES permitting authority for this purpose.

### What Do Small Construction Permits Require?

Following the Phase II rule for small construction activity, EPA established in 2009 (modified in 2014) effluent limitation guidelines for the Construction and Development industry that require any NPDES stormwater permits for regulated construction sites to address minimum nonnumeric effluent requirements. Referred to as the "C&D Rule" requirements, these effluent limitations are structured to require construction operators to first prevent the discharge of sediment and other pollutants through the use of effective planning and erosion control measures; and second, to control discharges that do occur through the use of effective sediment control measures. Operators must implement a range of pollution control and prevention measures to limit or prevent discharges of pollutants, including those from dry weather discharges as well as wet weather (i.e., stormwater). The non-numeric effluent limitations are designed to prevent the mobilization and stormwater discharge of sediment and sediment-bound pollutants, such as metals and nutrients, and to prevent or minimize exposure of stormwater to construction materials, debris, and other sources of pollutants on construction sites.

In addition, these non-numeric effluent limitations limit the generation of dissolved pollutants, such as nutrients, organics, pesticides, herbicides, and metals that may be present naturally in the soil on construction sites, such as arsenic or selenium, or may have been contributed by previous activities on the site such as agriculture or industrial activity.

Permitting authorities primarily rely on "Construction General Permits" (CGPs) to provide discharge authorization for discharges from regulated construction sites. In addition to the C&D Rule requirements that must be addressed in these permits, CGPs also typically include the following types of requirements:

Submission of a Notice of Intent (NOI) certifying that the construction operator is eligible for coverage under the CGP and agreement to abide by the terms and conditions of the permit. The NOI typically requires information about the operator, the location and size of the construction activities, and the receiving water to which stormwater discharges will be directed.

- The development of a Stormwater Pollution Prevention Plan (SWPPP) that describes the stormwater control measures to be installed and implemented to meet the requirements of the permit. EPA has developed a guide and sample template that construction operators can use to develop their SWPPPs. See <u>https://www.epa.gov/npdes/construction-general-permit-resources-tools-andtemplates#swppp</u>. Note that EPA's template might not include all required elements from state CGPs therefore operators may use EPA's template but may need to update it in accordance with their state's requirements.
- Compliance with stormwater control maintenance and site inspection requirements.
- 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.

# Can the Permitting Authority Reference a Qualifying Erosion and Sediment Control Program in NPDES Construction Permits?

Yes. The Phase II rule allows the permitting authority to include conditions in its stormwater construction permit that incorporate by reference qualifying state, tribal, or local erosion and sediment control program requirements. A qualifying program must include the following requirements:

- Requirements for construction site operators to implement appropriate erosion and sediment controls.
- Requirements for construction site operators to control waste such as discarded building materials, concrete truck washout, chemicals, litter, and sanitary waste that may cause adverse impacts to water quality.
- Requirements for construction site operators to develop and implement a stormwater pollution prevention plan.
- Requirements to submit a site plan for review that incorporates consideration of potential water quality impacts.

Should a state, tribal, or local program include one or more, but not all, of the elements listed above, the permitting authority can reference the program in the permit, provided it also lists the missing element(s) as a condition in the permit. Note that if a partially-qualifying program does not have all of the elements described above then the NPDES permitting authority may still reference the local program provisions that require the construction site operator to follow the program, but the permit must also require the operator to comply with any missing required elements in order to satisfy the conditions of the permit.

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#### For Additional Information

#### Contacts

A list of contacts for the U.S. EPA's Office of Wastewater Management (Headquarters), each EPA regional office, and state office is located at https://www.epa.gov/npde s/contact-us-stormwater

#### Your NPDES Permitting Authority

Most states and territories are authorized to administer the NPDES Program, except the following, for which EPA is the permitting authority:

- American Samoa
- District of Columbia
- Guam
- Johnston Atoll
- Massachusetts
- Midway and Wake Islands
- New Hampshire
- New Mexico
- Northern Mariana Islands
- Puerto Rico
- Most Indian country lands

### Reference Documents

- EPA's Stormwater Website
- Phase II Final Rule Fact Sheet Series
- Stormwater Phase II Final Rule (64 FR 68722)
- Final MS4 General Permit Remand Rule (81 FR 89320)
- Final Small MS4 Urbanized Area Clarification (88 FR 37994)
- National Menu of Best Management Practices for Stormwater Phase II
- <u>EPA's website on Construction Stormwater, including EPA's Construction General Permit</u> and Fact Sheet
- EPA SWPPP Guide and Sample SWPPP Templates
- Construction Industry Compliance Assistance Center <u>http://www.cicacenter.org/</u>
- Agricultural Handbook Number 703, Predicting Soil Erosion by Water: A Guide to Conservation Planning with the Revised Universal Soil Loss Equation (RUSLE), Chapter 2, pp. 21-64, January 1997. <u>http://www.epa.gov/npdes/pubs/ruslech2.pdf</u>

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