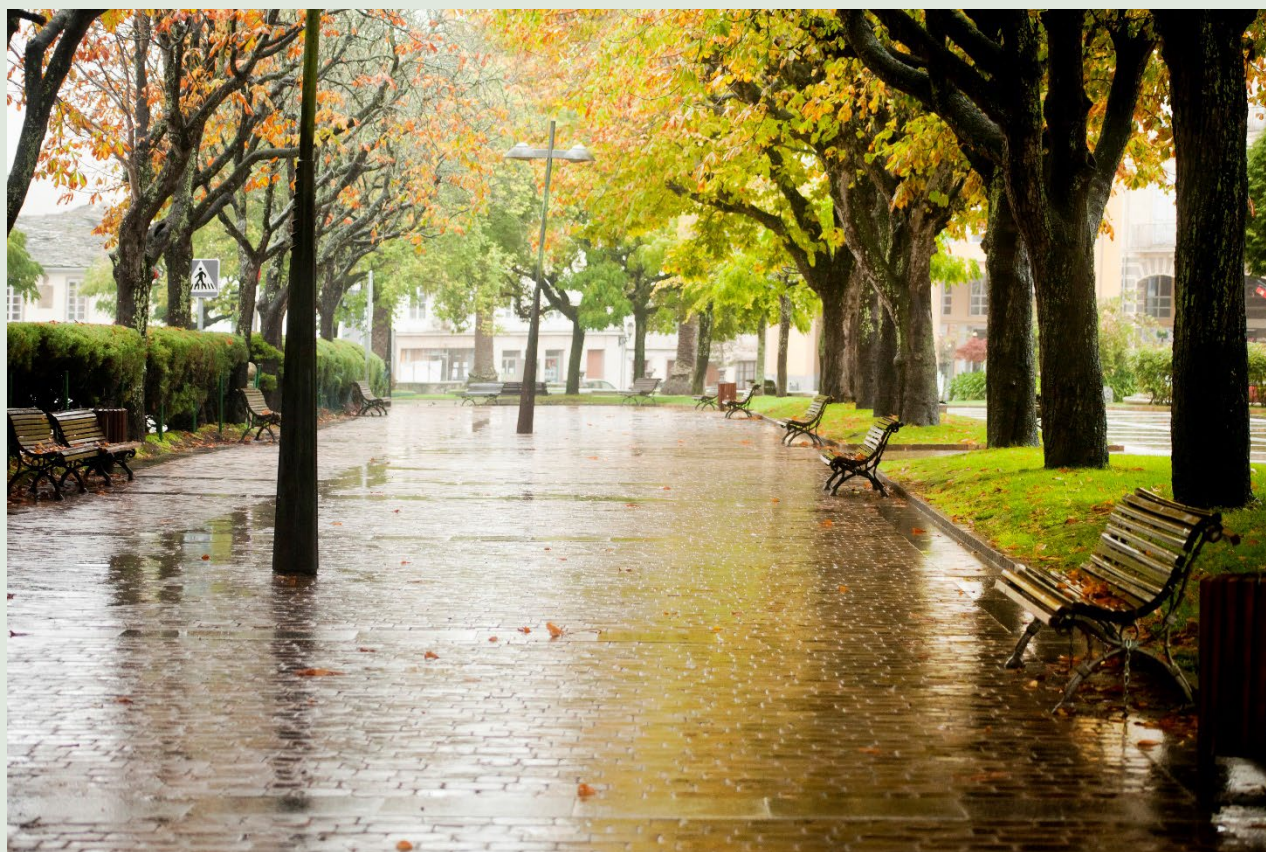


Stormwater Phase II Regulations: An Overview



This fact sheet provides a general overview of the Phase II stormwater regulations. The Phase II program further reduces adverse impacts to water quality from stormwater discharges from certain small MS4s and certain construction sites. This fact sheet describes why the Phase II stormwater program is necessary, who is covered, what is required, and what resources are available.

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Why Is the Phase II Stormwater Program Necessary?

Since the passage of the Clean Water Act (CWA), the quality of our Nation's waters has improved dramatically. Despite this progress, however, degraded waterbodies still exist. According to the 2017 National Water Quality Inventory Report to Congress, a summary of findings of four statistically-representative National Aquatic Resource Surveys and the site-specific assessment results reported by the states in their Integrated 305(b)/303(d) Reports, 46 percent of surveyed river and stream miles, 18 percent of the nation's coastal and Great Lakes waters, and 32 percent of the nation's wetland area are in poor biological condition and 21 percent of the nation's lakes have high levels of nutrients, algae, and plants.

The Phase I stormwater rule was promulgated in 1990 under the CWA. Phase I relies on National Pollutant Discharge Elimination System (NPDES) permit coverage to address stormwater runoff from: (1) "medium" and "large" municipal separate storm sewer systems (MS4s) generally serving populations of 100,000 or greater, (2) construction activity disturbing 5 acres of land or greater, and (3) ten categories of industrial activity.

The Stormwater Phase II stormwater rule represented the second step in EPA's effort to preserve, protect, and improve the Nation's water resources from polluted stormwater runoff. The Phase II rule was promulgated in 1999. The Phase II program expands upon the Phase I program by requiring operators of MS4s in urban areas with a population 50,000 or more people and operators of small construction sites to obtain NPDES permit coverage, and to implement programs and practices to control polluted stormwater runoff. See Fact Sheets [2.0](#) and [3.0](#) for overviews of the Phase II programs for MS4s and construction activity, respectively.

Phase II is intended to further reduce adverse impacts to water quality and aquatic habitat by instituting the use of controls on previously unregulated sources of stormwater discharges that have the greatest likelihood of causing continued environmental degradation. The environmental problems associated with discharges from MS4s in urban areas and discharges resulting from construction activity are outlined below.

MS4s in Urban Areas

Stormwater discharges from MS4s in urban areas with a population of 50,000 or more people, referred to as "small MS4s," are a concern because of the high concentration of pollutants found in these discharges. Concentrated development in these urban areas can substantially increase hardened surfaces, such as streets, driveways, parking lots, and sidewalks, on which pollutants from concentrated human activities settle and remain until a storm event washes them into nearby MS4 storm drains. Common pollutants that can be discharged to MS4s include pesticides, fertilizers, oils, salt, litter and other debris, and sediment. Stormwater runoff picks up and transports these and other harmful pollutants then discharges them – untreated – to waterways via storm sewer systems. Another concern is the possible illicit connections of sanitary wastes to MS4s, which can result in fecal coliform bacteria entering the storm sewer system. When left uncontrolled, these discharges can result in fish kills, the destruction of spawning and wildlife habitats, a loss in aesthetic value, and contamination of drinking water supplies and recreational waterways that can threaten public health.

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Construction Activity

Though the Phase I program required permitting for stormwater discharges from construction activities disturbing 5 or more acres (referred to as “large construction activities”), uncontrolled discharges from smaller construction activities are also a concern for water quality because of the devastating effects that sedimentation can have on local waterbodies, particularly small streams. Numerous studies have shown that the amount of sediment transported by stormwater runoff from construction sites with no controls is significantly greater than from sites with controls. In addition to sediment, construction activities yield pollutants such as pesticides, petroleum products, construction chemicals, solvents, asphalts, and acids that can contaminate stormwater runoff. During storms, construction sites may be the source of sediment-laden runoff, which can overwhelm a small stream channel’s capacity, resulting in streambed scour, streambank erosion, and destruction of near-stream vegetative cover. Where left uncontrolled, sediment-laden runoff has been shown to result in the loss of in-stream habitats for fish and other aquatic species, an increased difficulty in filtering drinking water, the loss of drinking water reservoir storage capacity, and negative impacts on the navigational capacity of waterways.

Who Is Covered by the Phase II Regulations?

The Phase II rule regulations automatically extend the National Pollutant Discharge Elimination System (NPDES) permitting program to the following two classes of stormwater dischargers on a nationwide basis:

1. Operators of small MS4s located in “urban areas with a population of 50,000 or more people” as delineated by the Bureau of the Census. A small MS4 is any MS4 not already covered by the Phase I regulations as a medium or large MS4. See Fact Sheets [2.1](#) and [2.2](#) for more information on small MS4 coverage.
2. Operators of construction activities that disturb 1 (one) or more acres of land, including construction activities disturbing less than 1 acre but that are part of a larger common plan of development or sale that does disturb more than 1 acre. Note that the Phase I regulations had previously covered only those construction activities that disturbed 5 (five) or more acres of land; the Phase II regulations extend the permitting program to construction disturbances of 1 or more acres and less than 5 acres. See [Fact Sheet 3.0](#) for more information on small construction activity coverage.

Waivers

Permitting authorities may waive “automatically designated” small MS4 or small construction site operators if they meet the necessary criteria. See Fact Sheets [2.1 \(small MS4 waivers overview\)](#), [3.0 \(construction waivers overview\)](#) and [3.1 \(construction rainfall erosivity waiver\)](#) for details.

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Additional Designations by the Permitting Authority

Small MS4s located outside of urban areas with a population of 50,000 or more people and any other stormwater discharges can be designated for coverage if the NPDES permitting authority or EPA determines that stormwater controls are necessary because the discharges contribute to a violation of a water quality standard or are a significant contributor of pollutants to a water of the United States. See [Fact Sheet 2.1](#) for more information on the designation of small MS4s located outside of urban areas with a population of 50,000 or more people.

What Does the Phase II Rule Require?

Operators of Phase II-designated small MS4s and small construction sites must obtain NPDES permit coverage, typically under a state- or EPA-issued general permit, and implement stormwater discharge management controls (sometimes referred to as “best management practices” (BMPs) or stormwater controls) that meet the specific requirements of the permit. Specific requirements for each type of discharge are summarized below.

Small MS4s

- Each permitted small MS4 operator must develop a written stormwater management program that describes in detail how it will comply with the NPDES permit requirements for each of the six minimum control measures: public education and outreach; public participation/involvement; illicit discharge detection and elimination; construction site runoff control; post-construction runoff control; and pollution prevention/good housekeeping.
- The Phase II regulations require that all small MS4 permits include clear, specific, and measurable requirements that meet the permit standard of reducing the discharge of pollutants to the MS4 to the “maximum extent practicable,” protecting water quality, and satisfying the appropriate water quality requirements of the CWA, and that address the six minimum control measures. The permit may also include additional, more stringent requirements where the permitting authority considers it necessary to protect water quality. See [Fact Sheets 2.3 through 2.8](#) for more information on each measure.

Small Construction Activity

- NPDES permits for small construction site operators must include provisions that address the federal effluent limitation guidelines for Construction and Development point sources (the “C&D rule”) at 40 CFR 450.21. Specific permit provisions to address the C&D rule requirements will be defined by the NPDES permitting authority.
- Many NPDES permitting authorities have adapted their existing Phase I general permits for large construction activity to also include small construction activity. Where this has occurred, the permits generally require the operator to develop a stormwater pollution prevention plan that details how the operator will comply with the permit’s requirements. See [Fact Sheet 3.0](#) for more information on potential program requirements and appropriate stormwater controls for small construction activity.

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What Resources are Available for Phase II Permittees?

EPA is committed to providing tools to facilitate implementation of the Phase II stormwater program in an effective and cost-efficient manner. EPA's website includes fact sheets, case studies, guidance documents, the MS4 permit compendia series, and the National Menu of BMPs, as well as other compliance assistance information. This information can be accessed at EPA's stormwater website at <https://www.epa.gov/npdes/stormwater-discharges-municipal-sources>.

For Additional Information

Contacts

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/npdes/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 Web Site](#)
- [Stormwater Phase II Final Rule \(64 FR 68722\)](#)
- [Final MS4 General Permit Remand Rule \(81 FR 89320\)](#)
- [Final Small MS4 Urbanized Area Clarification \(88 FR 37994\)](#)
- [Phase II Final Rule Fact Sheet Series](#)
- [National Menu of Best Management Practices for Stormwater Phase II](#)
- [MS4 Permits – Compendium of Clear, Specific, and Measurable Permitting Examples](#)

Disclaimer: This information is guidance only and does not establish or affect legal rights or obligations. Agency decisions in any particular case will be made by applying the law and regulations to the specific facts of the case.