

Construction Site Runoff Control Minimum Control Measure



[Photo](#) by U.S. EPA

This fact sheet profiles the Construction Site Runoff Control minimum control measure, one of six program areas an operator of a Phase II-regulated small municipal separate storm sewer system (MS4) is required to address as part of its National Pollutant Discharge Elimination System (NPDES) stormwater permit. This fact sheet offers some general considerations on strategies used by MS4s to implement construction site stormwater runoff control programs. It is important to keep in mind that the regulated small MS4 operator typically has flexibility in choosing exactly how to satisfy the construction requirements in its NPDES permit.

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Why Is the Control of Construction Site Runoff Necessary?

Polluted stormwater runoff from construction sites often flows to MS4s and ultimately is discharged into local rivers and streams. Of the pollutants listed in Table 1, sediment is usually the main pollutant of concern. According to the 2017 National Water Quality Inventory, states and tribes report that sedimentation is a top cause of pollution associated with impairment in assessed rivers and streams, second only to pathogens (bacteria). Sedimentation impairs 84,503 river and stream miles (12% of the assessed river and stream miles and 31% of the impaired river and stream miles). Sources of sedimentation include agriculture, urban runoff, construction, and forestry.

Table 1. Pollutants Commonly Discharged from Construction Sites

Sediment
Solid and sanitary wastes
Phosphorus (fertilizer)
Nitrogen (fertilizer)
Pesticides
Oil and grease
Concrete truck washout
Construction chemicals
Construction debris

Sediment runoff rates from construction sites, however, are typically 10 to 20 times greater than those of agricultural lands, and 1,000 to 2,000 times greater than those of forest lands. During a short period of time, construction sites can contribute more sediment to streams than can be deposited naturally during several decades. The resulting siltation, and the contribution of other pollutants from construction sites, can cause physical, chemical, and biological harm to our nation's waters. For example, excess sediment can quickly fill rivers and lakes, requiring dredging and destroying aquatic habitats.

What Is Required?

The Phase II regulations require permitted small MS4s to develop, implement, and enforce a program to reduce pollutants in stormwater runoff to their MS4 from construction activities that result in a land disturbance of greater than or equal to one acre, or the disturbance is less than one acre but is part of a larger common plan of development or sale. NPDES permits will also require, at a minimum, that the small MS4:

- Develop an ordinance or other regulatory mechanism to require erosion and sediment controls, and sanctions to ensure compliance, to the extent allowable under state, tribal, or local law.
- Require construction site operators to implement and maintain specific erosion and sediment control best management practices (BMPs).
- Require construction site operators to control wastes such as discarded building materials, concrete truck washout, chemicals, litter, and sanitary waste at the construction site that may cause adverse impacts to water quality.
- Implement procedures for: site plan review of construction plans that consider potential water quality impacts; site inspection and enforcement of control measures; and the receipt and consideration of information submitted by the public.

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Each permit specifies the minimum elements that must be included in each MS4's construction runoff program. These elements will differ from state to state.

EPA has compiled several examples from federal and state MS4 permits that address the construction runoff control measure. These examples are included in a permit compendium available on the EPA's stormwater website. See particularly Section D (Construction Site Runoff) in the EPA's [Compendium of MS4 Permitting Approaches – Part 1: Six Minimum Control Measures](#).

Considerations in Developing and Implementing This Measure

Additional explanation and considerations for several of the required components of the regulated small MS4's construction program are provided below.

Site Plan Review

The small MS4 operator must include in its construction program requirements for the implementation of appropriate BMPs on construction sites to control erosion and sediment and other waste at the site. Each small MS4 operator must also develop and implement procedures for conducting reviews of construction site plans. To ensure compliance with these requirements, EPA recommends that the small MS4 operator review the site plans submitted by the construction site operator before ground is broken.

Site plan review aids in compliance and enforcement efforts since it alerts the small MS4 operator early in the process to the planned use or non-use of proper BMPs and provides a way to track new construction activities. The tracking of sites is useful not only for the small MS4 operator's recordkeeping and reporting purposes, which are required under their NPDES stormwater permit (see Fact Sheet 2.9), but also for members of the public interested in ensuring that the sites are in compliance.

Inspections and Penalties

To ensure that the BMPs are properly designed, installed, and implemented, the small MS4 operator is required to develop procedures for site inspection and enforcement of control measures to deter infractions. Procedures could include steps to identify priority sites for inspection and enforcement based on the nature and extent of the construction activity, topography, and the characteristics of soils and receiving water quality. Inspections give the MS4 operator an opportunity to provide additional guidance and education, issue warnings, or assess penalties.

To conserve staff resources, one possible option for small MS4 operators is to consider using the same inspection staff that is used for other types of inspections at the same construction site, such as those related to health and safety building codes.

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In early 2002, EPA's Office of Compliance established a national workgroup to address issues related to the construction industry. The workgroup has developed a construction industry compliance assistance website (www.cicacenter.org) as a tool for builders and developers. Inspectors can use the website to find plain language explanations of the major environmental laws affecting the construction industry as well as guidance that can be distributed to developers and construction site operators.

Additionally, in 2022, EPA published a [web-based training program](#) for conducting construction inspections under the Agency's Construction General Permit (CGP). The training program, which is available in both English and Spanish, provides an overview of basic erosion and sediment control, and pollution prevention, principles and practices, and reviews procedures for conducting and documenting site inspections. The course also includes two 360-degree virtual inspections that show how to spot problems at construction sites during the inspection.

Information Submitted by the Public

The small MS4 operator is also required to develop procedures for the receipt and consideration of public inquiries, concerns, and information submitted regarding local construction activities. This provision is intended to further reinforce the public participation component of the regulated small MS4 stormwater program (see Fact Sheet 2.4) and to recognize the crucial role that the public can play in identifying instances of noncompliance.

The small MS4 operator is required only to *consider* the information submitted and may not need to follow-up and respond to every complaint or concern. Although some form of enforcement action or reply is not required, the small MS4 operator is required to demonstrate acknowledgment and consideration of the information submitted. A simple tracking process in which submitted public information, both written and verbal, is recorded and then given to the construction site inspector for possible follow-up may be sufficient in many cases depending on what the MS4 permit requires.

Are Construction Sites Covered Under the NPDES Stormwater Program?

Yes. The Phase II regulations require NPDES permit coverage for stormwater discharges from construction sites that disturb one or more acres of land, including smaller sites that are part of a larger common plan of development or sale (see Fact Sheet 3.0 for information on the Phase II construction program). These permits are required for construction stormwater that is discharged directly to receiving waters or that is first directed to an MS4 prior to discharge. Most states are authorized to implement the NPDES stormwater program and have issued state-specific construction general permits. EPA remains the permitting authority in a few states, territories, and on most land in Indian Country, however. For construction activities in areas where EPA is the permitting authority, construction site operators have the option of obtaining permit coverage under EPA's [Construction General Permit \(CGP\)](#). Areas that are eligible for permit coverage under the CGP are listed in [Appendix B](#) of the CGP. CGP requirements include, among other things, the submission of a Notice of Intent, compliance

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with sediment, erosion control, and pollution prevention requirements, and the development of a stormwater pollution prevention plan (SWPPP) that describes how the site will comply with the CGP.

To enable operators of regulated small MS4s to more effectively control construction site discharges into their MS4s, the Phase II regulations require MS4s to comply with their own set of NPDES permit requirements related to construction site runoff. These requirements, summarized in this fact sheet, apply to the MS4, whereas construction stormwater permits issued and administered by a state or EPA apply directly to construction site operators.

To aid operators of regulated construction sites in their efforts to comply with both local requirements and their own NPDES permit, the Phase II regulations also include a provision that allows the operator to meet its NPDES permit conditions through compliance with their local erosion and sediment control requirements if authorized by the permitting authority. This means that if a construction site is located in an area covered by requirements that are considered by the NPDES permitting authority to constitute a “qualifying state, tribal or local program” then the construction site operator’s compliance with the local program constitutes compliance with their NPDES permit. The ability to reference other programs in the NPDES permit is intended to reduce confusion between overlapping and similar local and NPDES permitting authority requirements, while still providing for both local and national regulatory coverage of the construction site. The provision allowing NPDES permitting authorities to reference other programs has no impact on, or direct relation to, the small MS4 operator’s responsibilities under the construction site runoff control minimum measure profiled here.

Is a Small MS4 Required to Establish Local Requirements for Construction Sites that the Permitting Authority has Waived from the NPDES Construction Program?

No. Under the Phase II regulations at 40 CFR § 122.26(b)(15)(i), NPDES permitting authorities may waive the need for otherwise eligible construction activities to obtain NPDES permit coverage if either (A) the rainfall erosivity of the construction site is below a defined level (i.e., below a factor of 5), or (B) stormwater controls are not needed based on an approved or established TMDL or equivalent analysis. If the permitting authority waives requirements for a small construction site, the small MS4 operator’s construction runoff program does not apply to that site.

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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/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 Website](#)
- [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](#)
- [Construction Industry Compliance Assistance Center](#)
- [EPA's Construction General Permit](#)

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.