

An official website of the United States government.

Close

We've made some changes to EPA.gov. If the information you are looking for is not here, you may be able to find it on the EPA Web Archive or the January 19, 2017 Web Snapshot.



National Menu of Best Management Practices (BMPs) for Stormwater

First released in October 2000, the menu of BMPs is based on the stormwater Phase II rule's six minimum control measures. EPA has found the practices listed in the menu of BMPs to be representative of the types of practices that can successfully achieve the minimum control measures.

Disclaimer

The BMP examples and references included on these fact sheets are not intended to be comprehensive. Additionally, the list of BMPs is not all-inclusive, and it does not preclude MS4s from using other technically sound practices.

The list of BMPs is not all-inclusive, and it does not preclude MS4s from using other technically sound practices. However, the practice or set of practices chosen needs to achieve the minimum measure.

Stormwater management practices that are already being used should be recognized and appropriate credit given to those who have already made progress toward protecting water quality. There is no need to spend additional resources for a practice that is already in existence and operational.

- [Measurable Goals Guidance for Phase II Small MS4s](#) - Designed to help small MS4 operators comply with the measurable goals permitting requirements.
- [Urban Management Measures Guidance](#) - Guidance to help municipalities and citizens in urban areas protect waterbodies from polluted runoff resulting from everyday activities.

Effective stormwater management often occurs by using a holistic system management approach. This approach takes into account the effectiveness of each stormwater practice, the costs of each practice, and resulting overall cost and effectiveness rather than looking at each practice in isolation. Some individual practices may not be effective alone but, in combination with others, may provide a key function in highly effective systems.

The Phase II rule encourages such system-building by stating the minimum requirements in more general terms, which allows you to use appropriate situation-specific sets of practices that will achieve the minimum measures.

Public Education

Public Involvement

Illicit Discharge Detection and Elimination

Construction

Post- Construction

Pollution Prevention/ Good Housekeeping

Construction Site Stormwater Runoff Control

Uncontrolled stormwater runoff from construction sites can significantly impact rivers, lakes, and estuaries. Sediment in waterbodies from construction sites can reduce the amount of sunlight reaching aquatic plants, clog fish gills, smother aquatic habitat and spawning areas, and impede navigation.

Phase II municipal separate storm sewer systems (MS4s) are required to develop a program to reduce pollutants in stormwater runoff to the MS4 for construction sites disturbing one or more acres. This primarily includes developing:

- An ordinance,
- Requirements to implement erosion and sediment control best management practices (BMPs),
- Requirements to control other waste at the construction site,
- Procedures for reviewing construction site plans,
- Procedures to receive and consider information submitted by the public, and
- Procedures for inspections and enforcement of stormwater requirements at construction sites.

In addition to the stormwater requirements that Phase II MS4s place on construction sites, construction operators may also need to apply for NPDES permit coverage, generally if their project disturbs more than 1 acre and discharges to a waterbody.

- [EPA's stormwater construction website](#) – Describes NPDES permit requirements.

Key BMPs and Resources

MS4s addressing the construction minimum measure should focus on the following key BMPs to help them in developing a stormwater construction program.

- [Construction Site Runoff Control Minimum Control Measure \(Phase II Fact Sheet 2.6\)](#)
- Local Ordinances for Construction Site Runoff Control
- Construction Phase Plan Review
- Contractor Training and Certification
- Municipal Construction Inspection Program

EPA is updating the fact sheets above. You can request a copy or recommend any changes by filling out and submitting the form at the bottom of the [NPDES Contact Us](#) webpage.

BMP Fact Sheets

EPA is updating the following fact sheets. You can request a copy or recommend any changes by filling out and submitting the form at the bottom of the [NPDES Contact Us](#) webpage.

The fact sheets describe the BMPs and generally provide applicability, implementation, and effectiveness information to help municipal stormwater and construction site operators comply with the stormwater Phase II requirements.

Municipal Program Oversight

- Construction Phase Plan Review
- Contractor Training and Certification
- Local Ordinances for Construction Site Runoff Control
- Municipal Construction Inspection Program

Construction Site Planning and Management

- Construction Sequencing
- Construction Site Operator BMP Inspection and Maintenance
- Land Grading
- Preserving Natural Vegetation

Erosion Control

- Chemical Stabilization
- [Compost Blankets](#)
- Dust Control
- Geotextiles
- Gradient Terraces
- Mulching
- Riprap

- Seeding
- Sodding
- Soil Retention
- Soil Roughening
- Temporary Slope Drain
- Temporary Stream Crossings
- Wind Fences and Sand Fences

Runoff Control

- Check Dams
- Grass-Lined Channels
- Permanent Slope Diversions
- Temporary Diversion Dikes

Sediment Control

- Brush Barrier
- Compost Filter Berms
- Compost Filter Socks
- Construction Entrances
- Fiber Rolls
- Filter Berms
- Sediment Basins and Rock Dams
- Sediment Filters and Sediment Chambers
- Sediment Traps
- Silt Fences
- Storm Drain Inlet Protection
- Straw or Hay Bales
- Vegetated Buffers

Good Housekeeping/Materials Management

- Concrete Washout
- General Construction Site Waste Management
- Spill Prevention and Control Plan
- Vehicle Maintenance and Washing Areas at Construction Sites

Resources

EPA

- Construction Industry Compliance Assistance Web Site **EXIT**
provides plain language information on environmental rules, including stormwater, for the construction industry.
- Model Illicit Discharge and Connection Stormwater Ordinance - Includes erosion and sediment control ordinance language.
- Urban Management Measures Guidance - Chapter 5 focuses on construction site erosion, sediment, and chemical control.

- [Stormwater Pollution Prevention Plans for Construction Activities](#) - Steps necessary to develop a stormwater pollution prevention plan for construction activity.
- [Outreach Materials for the Construction Industry](#) – Includes brochures in English and Spanish and a poster.

Other

- [Minnesota Pollution Control Agency Stormwater Guidance](#) EXIT
 - [Stormwater Construction Inspection Guide](#) EXIT
(35 pp, 5.77 MB, [About PDF](#)) - Describes how municipal inspectors should conduct construction site inspections.
 - [Stormwater Compliance Assistance Tool Kit for Small Construction Operators](#) EXIT (44 pp, 500 K, [About PDF](#)) - Guidance to help small construction operators comply with their stormwater requirements.
- [Kentucky Erosion Prevention and Sediment Control Field Guide](#)
- [2005 Stormwater Management Manual for Western Washington: Volume II -- Construction Stormwater Pollution Prevention](#) EXIT - Describes 12 elements of construction SWPPPs and BMP standards and specifications.

LAST UPDATED ON DECEMBER 11, 2019