



WATER RESOURCE CENTER

FACT SHEET 5 of 7

Southwestern Pennsylvania Commission

WATER RESOURCE CENTER

Mission

To promote regional collaboration on water topics; be a leader in facilitating coordination and education; and provide technical assistance to its member governments.

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CONSTRUCTION SITE RUNOFF CONTROL

Small MS4 Program: Minimum Control Measure #4

Construction Site Runoff Control is one of the 6 minimum control measures (MCMs) required under the small MS4 program\*. The goal of the Construction Site Runoff Control MCM is to protect our waterways from stormwater-related pollution that can result from construction activities. Four (4) best management practices (BMPs) are required under this MCM.

Under Chapter 102, Erosion and Sediment (E&S) Control, County Conservation Districts and/or DEP must issue a permit for earth disturbance activities greater than or equal to 1 acre. If the permittee chooses to rely on DEP's statewide program for issuing NPDES permits for stormwater discharges associated with construction activities, they satisfy all requirements under this MCM. It is a good practice for the permittee to have a written agreement, such as a Memorandum of Understanding (MOU), with their County Conservation District which clearly defines roles in the permitting, inspection, and enforcement of land development activities.

BMP #1 - Develop your program consisting of all procedures necessary to comply with the requirements of this MCM. The program must include:

- Construction stormwater permitting
Construction inspection
Enforcement of installation and maintenance of E&S controls

The program should be developed within the first year of permit coverage and reviewed/updated annually. A simple tracking system for active construction sites, inspections, enforcement actions, and other activities related to this MCM can simplify the reporting process while ensuring that all applicable activities are being managed.

Pollutants Commonly Associated with Construction Sites

- Sediment
Trash
Sanitary Waste
Phosphorus
Nitrogen
Pesticides
Oil and Grease
Concrete Truck Washout
Construction Chemicals



Sediment is the primary pollutant of concern associated with construction site stormwater runoff. Sediment-polluted stormwater can cause physical, chemical, and biological damage to waterways. Proper installation and maintenance of erosion and sediment control best management practices is essential to protect our waterways.

Photos: catawbariverkeeper.org

(OVER)

**BMP #2 – Enact, implement, and enforce an ordinance to require the implementation of erosion and sediment control BMPs, as well as sanctions to ensure compliance.** Permittees should adopt the ordinance within the first year of permit coverage.

**BMP #3 – Develop and implement requirements for construction site operators to control waste at the construction site that may cause adverse impacts to water quality.** Sediment is the primary pollutant of concern for MCM #4; however, other pollutants associated with construction are also important and should be addressed under this BMP. Pollutants may include but are not limited to: discarded building materials, washout from concrete trucks, chemicals, litter, and sanitary waste. Permittees should establish requirements within the first year. The goal of these requirements should be communicated to construction site operators during pre-construction meetings. Permittees must keep detailed records of site inspections, findings, and any resulting actions.

**BMP #4 – Develop and implement procedures for the receipt and consideration of public inquiries, concerns, and information submitted by the public regarding local construction activities.** The permittee should demonstrate acknowledgement and consideration of the information submitted. Permittees should establish and implement a tracking system to keep a record of any submitted public information as well as responses, actions, and results. This BMP should be implemented during each year of permit coverage. This BMP closely aligns with and supports requirements associated with MCM #2, Public Involvement and Participation.

## Sediment Pollution in Our Waterways

Sediment pollution is, by volume, the greatest contributor to pollution in Pennsylvania waterways. Nationally, it is the second leading cause of pollution in impaired waterways (second only to bacteria). Sediment can cause physical, biological, and chemical harm to streams, lakes, wetlands, and rivers. According to the EPA, sediment runoff from construction sites can be 1,000 to 2,000 times greater than that of forested land, and 10 to 20 times greater than that of agricultural land. The installation and maintenance of construction site erosion and sediment controls is critical for the protection of our waterways.



Polluted runoff from construction sites eventually makes its way to our waterways untreated (left). Sediment is the most common pollutant associated with construction sites. Impacts of uncontrolled sediment runoff include but are not limited to: ecosystem damage, storm system infrastructure damage, and increased costs of producing drinking water.  
*Photo: blog.epa.gov*

## Elements of An Effective Stormwater Site Plan

A stormwater site plan is one of many essential elements necessary to minimize stormwater pollution from construction sites. Ten (10) key elements of an effective stormwater site plan include:

1. Minimize clearing and grading
2. Protect waterways
3. Phase construction to limit soil exposure
4. Immediately stabilize exposed soils
5. Protect steep slopes and cuts
6. Install perimeter controls to filter sediments
7. Employ advanced sediment settling controls
8. Certify and train contractors on stormwater site plan implementation
9. Control waste at the construction site
10. Inspect and maintain BMPs

*Source: <http://water.epa.gov/polwaste/npdes/swbmp/Construction-Phase-Plan-Review.cfm>*

\*Please note that this information is not intended to replace regulatory requirements. Actual individual and/or general permits issued by PADEP should be followed to ensure that MS4 regulatory requirements are met. This information was adapted from Appendix A of PADEP's Stormwater Management Program & EPA's Stormwater Fact Sheet Series).