POST-CONSTRUCTION RUNOFF CONTROL
Small MS4 Program: Minimum Control Measure #5

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.

Two Chatham Center
Suite 500
112 Washington Place
Pittsburgh, PA 15219-3451
Voice (412) 391-5590
Fax (412) 391-9160
www.spcwater.org

Post-Construction Runoff Control is one of the six (6) Minimum Control Measures (MCM) required under the Small MS4 program*. The goal of the Post-Construction Runoff Control MCM is to avoid increased stormwater runoff problems and increased non-point source pollution that often accompanies the development of land and associated increase in impervious surfaces. Six (6) best management practices (BMPs) are required under this MCM.

Under Chapter 102, Erosion and Sediment (E&S) Control, County Conservation Districts and/or the Pennsylvania Department of Environmental Protection (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 BMPs 1-3 of this MCM. It is a good practice for permittees 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 a written procedure that describes how the permittee will address all required components of this plan. Guidance can be found in the Pennsylvania Stormwater Best Management Practices Manual, which can be accessed at www.elibrary.dep.state.pa.us/dsweb/View/Collection-8305. The plan should be developed within the first year of permit coverage and be annually reviewed and updated where necessary. Minimum requirements of the plan include:

- Minimum requirements for use of structural and/or non-structural BMPs in plans for development and redevelopment
- Criteria for selecting and standards for sizing stormwater BMPs
- Implementation of an inspection program to ensure that BMPs are properly installed

BMP #2 – Require the implementation of a combination of structural and/or non-structural BMPs that are appropriate to the local community, that minimize water quality impacts, and that are designed to maintain pre-development runoff conditions. The ordinance requirements under BMP #4 of this MCM (see next page) will satisfy this requirement. All qualifying development or redevelopment projects should be reviewed to ensure that their post-construction stormwater management plans and selected BMPs conform to the applicable requirements. A tracking system should be used to record qualifying projects and their BMPs.

Preserving and restoring riparian buffers (right) are best management practices that can effectively manage stormwater in post-construction situations.

(OVER)

BMP #3 – Ensure that controls are installed that will prevent or minimize water quality impacts. Qualifying development or redevelopment projects should be inspected during construction to ensure proper installation of the approved post-construction stormwater management (PCSM) BMPs. A tracking system should be used to track inspections and results. Permittees that do not rely on Chapter 102 as a QLP to fulfill these requirements must summarize construction inspections and results in periodic reports.

BMP #4 – The permittee should enact, implement, and enforce an ordinance or other regulatory mechanism to address post-construction stormwater runoff from new development and redevelopment projects, as well as sanctions and penalties associated with non-compliance, to the extent allowable under state law. An ordinance must be adopted within the first year.

BMP #5 – Develop and implement measures to encourage and expand the use of Low Impact Development (LID) in new and redevelopment. Measures also should be included to encourage retrofitting LID into existing development. DEP's Pennsylvania Stormwater Best Management Practices Manual provides guidance on implementing LID practices. An inventory of development and redevelopment projects that discharge stormwater to your regulated MS4 must be kept. In this inventory, note which projects that have been authorized for construction since 3/10/2003 that incorporated LID practices (and specifics on what LID practices were used). Additionally, ordinances should be enacted that are consistent with LID practices. Sections of existing ordinances that conflict with LID practices should be repealed.

BMP #6 – Ensure adequate operation and maintenance of all post-construction stormwater management BMPs installed at all qualifying development or redevelopment projects (including those owned or operated by the permittee). Within the first year of permit coverage, permittees should develop and implement a written inspection program to ensure that BMPs are properly operated and maintained. This program should be reviewed annually and updated accordingly. An inventory of PCSM BMPs should be developed and updated regularly. The inventory should include all PCSM BMPs installed since 3/10/2003 that discharge to your regulated MS4. Information required in inventory includes but is not limited to: owner, location, type of BMP, installation date, required maintenance, inspection activities, and an assessment by the permittee to determine if proper inspection and maintenance of BMP has been taking place.

Bioswales (above) are a structural BMP that can help mitigate the effects of stormwater once a site has been developed.

What is a Post Construction Stormwater BMP (PCSM BMP)?

PCSM BMPs are practices that are put in place to prevent and mitigate stormwater runoff after the site is developed. PCM BMPs include non-structural and structural BMPs. Non-structural BMPs include practices that aim to avoid and/or minimize damages associated with stormwater volumes and runoff from development. Structural BMPs are engineered systems that are designed to mitigate the impacts of stormwater.

Examples of Non-Structural BMPs
- Minimize Impervious Area
- Protect Special Value Features (e.g., Floodplains, Wetlands, Riparian areas, etc.)
- Re-vegetate Disturbed Areas with Native Vegetation

Examples of Structural BMPs
- Rain Gardens
- Constructed Wetlands
- Riparian Buffer Restoration

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*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).