

**National Pollutant Discharge Elimination System (NPDES)
Stormwater Discharges
From
Small Municipal Separate Storm Sewer Systems (MS4s)
General Permit (PAG-13)**

This document contains the application and information for operators of regulated small MS4s to comply with federal requirements to apply for a permit and to implement a stormwater management program.

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GENERAL PERMIT PAG-13 FOR STORMWATER DISCHARGES FROM SMALL MUNICIPAL SEPARATE STORM SEWER SYSTEMS (MS4s)

FACT SHEET

EXECUTIVE SUMMARY

Federal regulations require municipalities designated by federal regulations or DEP to obtain permits and to develop and implement a Stormwater Management Program (SWMP).

General Permit PAG-13 provides a streamlined process to meet the federal requirements. In some cases, such as a municipality that is not eligible for general permit coverage because it discharges to a “Special Protection” watershed, an Individual NPDES MS4 Permit is needed. A municipal stormwater management program must be fully implemented in the first permit term and it must be continued and improved during subsequent permit terms. If your regulated small MS4 discharges stormwater into any receiving waters with approved TMDLs, you must develop, submit to DEP for approval, and ensure implementation of an MS4 TMDL Plan that is consistent with the applicable TMDLs and that achieves the required pollutant load reductions in the applicable wasteload allocations (WLAs) of the TMDLs. Your MS4 TMDL Plan must be submitted with your Notice of Intent to use PAG-13 or your application for an Individual MS4 Permit.

WHO CAN USE GENERAL PERMIT PAG-13?

General Permit PAG-13 addresses stormwater discharges from certain small municipal separate storm sewer systems (small MS4s). The federal regulations define a “small MS4” at 40 CFR §122.26(b)(16), as all separate storm sewers that are owned or operated by the United States, a State, city, town, borough, county, parish, district, association, or other public body (including State departments of transportation, universities, local sewer districts, hospitals, military bases, and prisons) having jurisdiction over disposal of sewage, industrial wastes, storm water, or other wastes, including special districts under State law such as a sewer district, flood control district or drainage district, or similar entity, or an Indian tribe or an authorized Indian tribal organization, or a designated and approved management agency under section 208 of the CWA that discharge to waters of the United States.

Within a municipality, small MS4s are designated as “regulated” primarily on the basis of whether or not they are located within an “urbanized area” as determined by the 1990 and 2000 censuses. The current list of urbanized areas, and the municipalities that contain these urbanized areas, or parts thereof, can be found at the Department of Environmental Protection’s (DEP)’s stormwater website: www.depweb.state.pa.us, keyword Stormwater. There are areas in approximately 940 municipalities affected by these requirements statewide.

An **Individual NPDES MS4 Permit** application (reviewed and approved by DEP) is **required** when a regulated MS4 discharges stormwater to waters of the Commonwealth that have an existing or designated use classified as **“Special Protection” (High Quality or Exceptional Value)** under 25 Pa. Code Chapter 93 of DEP’s regulations. Regulated small MS4s that are **not** located in a High Quality or Exceptional Value watershed and that meet the requirements for “General Permit Eligibility” listed in the PAG-13 Authorization to Discharge may apply for coverage under the General Permit.

SUMMARY OF THE PERMIT REQUIREMENTS

Federal regulations issued in 1999 establish a permit requirement within the National Pollutant Discharge Elimination System (NPDES) for discharges to surface waters from certain MS4s. The permit requirement applies to “small MS4s” which are designated by either EPA or DEP. The current list of municipalities with designated small MS4s can be obtained from DEP regional offices listed at the end of this Fact Sheet, or at www.depweb.state.pa.us, keyword Stormwater.

The permit term is for a maximum of five years, followed by subsequent permits for similar timeframes. Owners or operators of regulated small MS4s must apply for permit coverage or apply for a waiver from permit coverage by submitting a permit application or a Notice of Intent together with a Request for Waiver. The permit application or Notice of Intent must describe the program that the permittee intends to implement, including BMPs to meet the measurable goals for each element of the municipal stormwater management program. A Stormwater Management Program (SWMP) to be utilized by owners or operators of regulated small MS4s is included as an appendix to the Authorization to Discharge.

What are the requirements? The permittee must, within the first permit term, develop, implement, and enforce a Stormwater Management Program to reduce the discharge of pollutants from its regulated MS4s to the Maximum Extent Practicable (MEP) to meet water quality standards and satisfy the appropriate water quality requirements of the federal Clean Water Act and the Pennsylvania Clean Streams Law.

The program must be approved by DEP and contain Best Management Practices (BMPs) and measurable goals for each of the six Minimum Control Measures (MCMs) described below. Also, as a part of the SWMP, the owner or operator must enact and implement either one of the MS4 Stormwater Management Ordinances; a Model Ordinance from an applicable Act 167 Stormwater Management Plan approved by DEP in 2005 or later; or an ordinance(s) that satisfies an MS4 Stormwater Management Ordinance Checklist.

The federal regulations establish six MCMs that must be implemented by permittees (these are “narrative” permit effluent limitations). The six MCM’s in the federal regulations are:

1. Public Education and Outreach,
2. Public Participation and Involvement,
3. Illicit Discharge Detection and Elimination,
4. Construction Site Runoff Control,
5. Post-Construction Stormwater Management in New Development and Redevelopment, and
6. Pollution Prevention and Good Housekeeping for Municipal Operations and Maintenance

Owners or operators of regulated small MS4s in Pennsylvania’s designated urbanized areas must implement a Stormwater Management Program that contains BMPs to satisfy each one of these MCMs. They must do this within the first 5-year permit term.

In addition, permittees whose regulated small MS4s are located in, or discharging to any portion of a waterbody for which an applicable Total Maximum Daily Load (TMDL) has been approved must develop, submit to DEP for approval, and ensure implementation of measures consistent with the wasteload allocation in the TMDL. PAG-13, permittees must (1) develop, submit to DEP for approval, and ensure implementation of an MS4 TMDL Plan that consists of TMDL control measures such as disconnecting impervious areas, planting trees, constructing or upgrading recharge/infiltration facilities, retrofitting stormwater basins, restoring stream banks, establishing or re-establishing stream buffers, and installing green infrastructure; or (2) incorporate into your MS4 TMDL Plan and ensure implementation of the TMDL Control Measures from a watershed or regional TMDL Plan. For either option, you must ensure implementation of measures to achieve reductions in the discharge of pollutants from your regulated small MS4 consistent with the reductions required by the TMDL.

If any portion of your regulated small MS4 is located in and discharging to receiving watersheds draining to the Chesapeake Bay, then you must develop, submit to DEP for approval, and ensure implementation of a Chesapeake Bay Pollutant Reduction Plan in accordance with Part C(3) of the Authorization to Discharge. If you are required to develop, submit to DEP for approval, and ensure implementation of an MS4 TMDL Plan to meet a waste load allocation (WLA) for sediment, phosphorus, or nitrogen, as described in Part C(1) of the Authorization to Discharge, then you may rely on and incorporate into the Chesapeake Bay Pollutant Reduction Plan the portions of such MS4 TMDL Plans that address nitrogen, phosphorus, and sediment associated with existing stormwater discharges to receiving watersheds draining to the Chesapeake Bay. Your Chesapeake Bay Pollutant Reduction Plan must be submitted within 12 months of the effective date of your Approval of General Permit Coverage.

To put these requirements into the federal regulatory context, EPA has promulgated two phases of stormwater permit regulations. Phase I covers *large* and *medium* municipalities (as well as industrial activities and earth disturbance activities greater than five acres). Phase I was implemented in Pennsylvania beginning in 1992. Phase II of the

federal stormwater regulations (the regulation addressed in this Fact Sheet) reduced the minimum size of earth disturbance activities subject to NPDES permitting from five acres to one acre and it expanded the range of regulated MS4s to include small ones in “urbanized areas” (regulated small MS4s) and was implemented in Pennsylvania in 2003.

MS4 STORMWATER MANAGEMENT PROGRAM

DEP has included a Stormwater Management Program that permittees must use to meet the eligibility requirements to use PAG-13.

Permittees who choose to develop their own Stormwater Management Program must apply for an Individual NPDES MS4 Permit. Individual NPDES MS4 Permits are required when a regulated small MS4 discharges stormwater to, or is located in, waters of the Commonwealth that have an existing or designated use that is classified as “Special Protection” under 25 Pa. Code Chapter 93 of DEP’s regulations.

USE OF EQUIVALENT STATE AND LOCAL PROGRAMS TO IMPLEMENT AND FUND CERTAIN MUNICIPAL STORMWATER PROGRAM ELEMENTS

The federal regulations allow DEP and permittees to use qualifying state and local programs to satisfy NPDES permit requirements (see 40 CFR §122.34(c)).

1. The Pennsylvania Stormwater Management Act (Act 167), 32 P.S. §§680.1 *et seq.*, requires counties to develop, and municipalities to implement, comprehensive stormwater management programs. The county develops the watershed-based plans with the assistance of the municipalities.

Act 167 provides 75% state funding for both planning and implementation. The local cost-share can be met, in part, by in-kind service contributions. Whenever the appropriation in the Commonwealth’s general fund budget is insufficient to make the payments described above, Section 17(c) of Act 167 requires DEP to report such fact to the General Assembly and it requires DEP to request a deficiency appropriation of funds necessary to provide the grants authorized in Section 17 of Act 167. Beginning with fiscal year 2009, the general fund budgets provided no appropriation for preparation or implementation of Act 167 stormwater management plans.

A municipality has the opportunity to implement DEP-approved Act 167 stormwater management plans to satisfy some of the MS4 permit requirements. A municipality may enact an ordinance consistent with the model ordinance in an Act 167 plan approved by DEP in 2005 or later to satisfy the MS4 permit requirement to enact a stormwater management ordinance.

2. DEP is responsible for implementation of a statewide program for issuing NPDES Permits for Stormwater Discharges Associated with Construction Activities. DEP’s program requires operators of construction projects to implement a Post-Construction Stormwater Management program to protect, maintain, reclaim and restore water quality and to protect the existing and designated uses of surface waters of the Commonwealth. Since DEP’s program for NPDES Permits for Stormwater Discharges Associated with Construction Activities includes requirements to implement controls for post-construction stormwater, MS4 permittees may choose to rely on DEP’s program to satisfy all of the requirements under the minimum control measure for erosion and sediment control (MCM 4) and all of the requirements under BMPs #1 through #3 in the minimum control measure for post construction stormwater control (MCM 5) rather than operating their own local programs to satisfy these requirements under these minimum control measures.

Municipalities or counties may not issue a building or other permit or final approval to anyone proposing to conduct earth disturbance activities until the required NPDES Construction permit (or approved coverage under a General NPDES Permit) has been issued by DEP or by a delegated County Conservation District (CCD).

Municipalities that implement local programs to regulate construction stormwater controls or post-construction stormwater controls may choose to explore opportunities to negotiate an agreement with their CCD to utilize the CCD’s services for plan reviews, construction inspection, post construction inspections, and training.

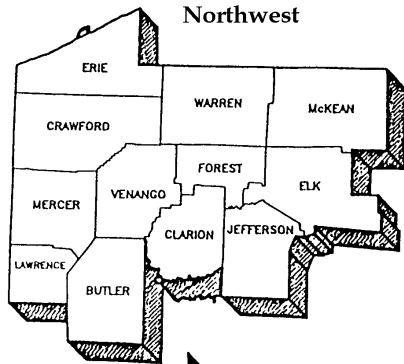
OTHER RESOURCES

For many of the six minimum control measures, DEP has developed a set of resource materials for municipalities. Educational materials, public participation plan outlines, and many other useful materials are available online at www.depweb.state.pa.us, keyword: Stormwater.

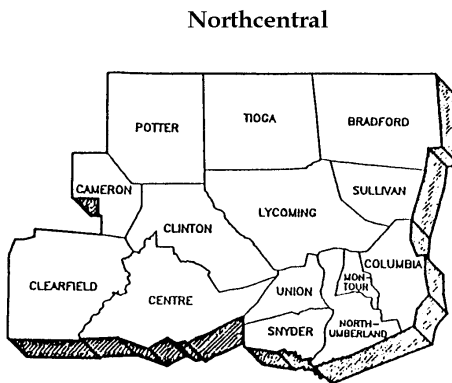
For more information,
Call the DEP regional office in your area or contact:

Department of Environmental Protection
Bureau of Point and Non-Point Source Management
400 Market St.
P.O. Box 8775
Harrisburg, PA 17105
717-787-6827

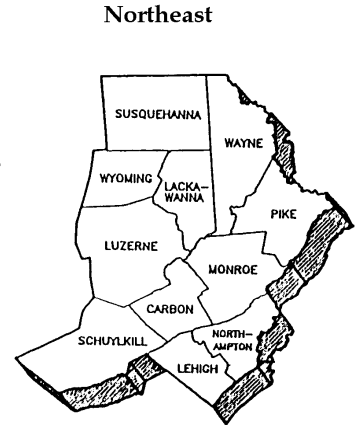
DEP REGIONAL OFFICES



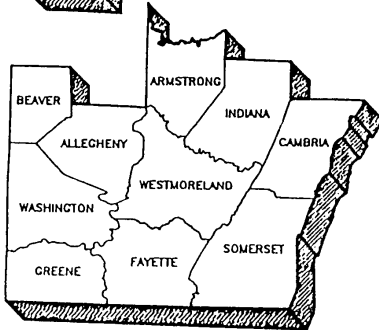
Northwest



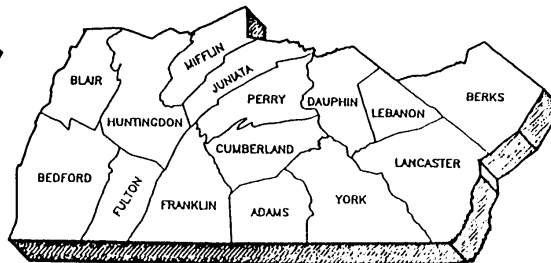
Northcentral



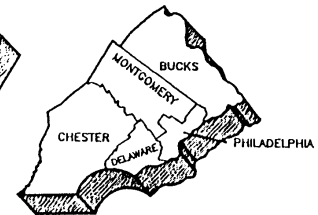
Northeast



Southwest



Southcentral



Southeast

Southeast Region

2 East Main Street
Norristown, PA 19401
484-250-5970

Counties: Bucks, Chester, Delaware, Montgomery and Philadelphia

Southwest Region

400 Waterfront Drive
Pittsburgh, PA 15222-4745
412-442-4000

Counties: Allegheny, Armstrong, Beaver, Cambria, Fayette, Greene, Indiana, Somerset, Washington and Westmoreland

Southcentral Region

909 Elmerton Ave.
Harrisburg, PA 17110
717-705-4700

Counties: Adams, Bedford, Berks, Blair, Cumberland, Dauphin, Franklin, Fulton, Huntingdon, Juniata, Lancaster, Lebanon, Mifflin, Perry and York

Northwest Region

230 Chestnut St.
Meadville, PA 16335-3481
814-332-6984

Counties: Butler, Clarion, Crawford, Elk, Erie, Forest, Jefferson, Lawrence, McKean, Mercer, Venango and Warren

Northeast Region

2 Public Square
Wilkes-Barre, PA 18701-1915
570-826-2511

Counties: Carbon, Lackawanna, Lehigh, Luzerne, Monroe, Northampton, Pike, Schuylkill, Susquehanna, Wayne and Wyoming

Northcentral Region

208 W. Third St., Suite 101
Williamsport, PA 17701
570-327-3636

Counties: Bradford, Cameron, Clearfield, Centre, Clinton, Columbia, Lycoming, Montour, Northumberland, Potter, Snyder, Sullivan, Tioga and Union



INSTRUCTIONS Notice of Intent (NOI)

FOR COVERAGE UNDER NPDES GENERAL PERMIT FOR STORMWATER DISCHARGES (PAG-13) FROM SMALL MUNICIPAL SEPARATE STORM SEWER SYSTEMS (MS4s)

Refer to Figure 1 (found on page 9 of these instructions). "Flow Chart to Determine Eligibility for Coverage Under Pennsylvania NPDES General Permit (PAG-13)" to determine the eligibility of your regulated small MS4 for coverage under this General Permit.

I. GENERAL INSTRUCTIONS

Who Must Apply for a National Pollutant Discharge Elimination System (NPDES) Stormwater Permit?

Certain small municipal separate storm sewer systems (small MS4s) in "urbanized areas" as defined in 40 CFR Part 122, that discharge stormwater into surface waters of the Commonwealth (including intermittently flowing streams and drainage channels) are required to have the discharges authorized by an NPDES stormwater permit. See the PAG-13 General Permit *Fact Sheet* for more information about these requirements.

Maps of urbanized areas and a list of regulated small MS4s in Pennsylvania can be obtained from DEP's website, www.dep.state.pa.us, keyword: Stormwater Management then click on "Permitting."

What is a Notice of Intent (NOI)?

An NOI is part of the General Permit process in Pennsylvania. A General Permit such as this one for operation of regulated small MS4s provides a simplified process to obtain permit coverage if the eligibility requirements are met. Instead of issuing an individual permit for each MS4, one statewide permit is issued and operators of eligible regulated small MS4s may apply for coverage under the statewide permit using a Notice of Intent (NOI). This process was established by DEP's regulations in 25 Pa. Code Chapter 92a.

Who May Use the Notice of Intent (NOI) Form?

This form may be used by owners or operators of regulated small MS4s who are eligible for coverage under the General Permit (PAG-13), as described in the "Authorization to Discharge" for PAG-13. MS4s that are not eligible for coverage under this General Permit, such as those with discharges to "Special Protection" waters, may not be covered using this General Permit, but instead must apply for coverage under an Individual NPDES MS4 Permit.

Where to File the Notice of Intent

NOIs are submitted to the appropriate regional office of DEP. Refer to Table 1 for locations and addresses.

When to File the Notice of Intent

To **RENEW** your current coverage authorization, DEP must receive your administratively complete and acceptable NOI a minimum of 180 days prior to the expiration date of your current authorization. **NOTE: An expired permit can not be renewed.**

NEW applicants seeking coverage under the General Permit must submit, and DEP must receive, an administratively complete and acceptable NOI to DEP within a maximum of 180 days from the date of the notice of designation pursuant to 40 CFR § 122.26(a)(9).

DEP may deny coverage under the General Permit and require submittal of an application for an Individual NPDES MS4 Permit based on a review of the NOI or other information.

Notice of Intent Filing Fee

Unless you are exempt from payment of the filing fee in accordance with 25 Pa. Code § 92a.26(i), a check for \$500.00 must be included with the NOI. An NOI for a joint permit must be accompanied by a check for only one (1) filing fee. The check must be made payable to the "Commonwealth of Pennsylvania Clean Water Fund" and the check must be dated within 10 days of the NOI submittal date.

Required Attachments

The following attachments must be filed with the NOI:

1. Notice of Intent filing fee (\$500.00).
2. Map: A USGS topographical quadrangle, or equivalent, map showing the boundaries of your municipality and the boundaries of the urbanized areas that contain your regulated small MS4s.
3. A map of your regulated small MS4s, their outfalls, and the names of the waters that receive discharges from the outfalls. If the maps are available only electronically, then you must provide instructions on how the public (and DEP) can access your maps.
4. If your regulated small MS4s discharge to any portion of waters with applicable wasteload allocations in the approved TMDLs, then you must include an MS4 TMDL Plan with your NOI (see Part C of the Authorization to Discharge for more information on MS4 TMDL Requirements).

II. NOTICE OF INTENT FORM

A. Multi-Municipal Joint Application

According to 40 CFR 122.33 (b)(1) you may file your own NOI, or you and other municipalities or governmental entities may jointly submit an NOI. If you want to share responsibilities for meeting the minimum control measures with other municipalities or governmental entities, you must submit an NOI that describes which minimum control measures you will implement and identify the entities that will implement the other minimum control measures within the area served by your regulated small MS4s.

1. Indicate whether the application is being made jointly with other municipalities.
2. Attach a completed "Applicant Information for a Joint NPDES MS4 Authorization" for every joint applicant.
3. Provide a map showing the locations of the regulated small MS4s, the urbanized area boundaries, and municipal boundaries of each of the joint permittees.

B. MS4 Operator Information

1. Name of the operator of the regulated small MS4 – Provide the legal name of the governmental entity or other legal entity that controls the operation of the regulated small MS4 described in this application.
2. Contact Person – Provide the name of a primary contact person who will be responsible for receiving and responding to all correspondence from DEP regarding the MS4 General Permit and stormwater discharges permitted under it. The contact person should be a senior employee or staff member of the municipality.
3. Title/Role – Provide the title or role of the Contact Person (Example: "Township Manager").
4. Division/Department – Provide the name of the organization in which the Contact Person is employed (Example: "Water Quality Bureau" or "Department of Public Works").
5. Phone/Fax Numbers – Provide the phone number and fax number for the Contact Person.
6. E-mail Address – Provide the e-mail address for the Contact Person.
7. Mailing Address – Provide the mailing address for the Contact Person, including a street address (or P.O. Box), City and Zip Code. This is where all correspondence related to the MS4 General Permit will be sent.
8. Acknowledge by checking the box that the regulated small MS4s included in the NOI meet the eligibility requirements for using the MS4 General Permit (PAG-13).
9. Enclose USGS Topographical, or equivalent, maps that show municipal boundaries for all permittees listed in Sections A or B of the NOI. Show the location of regulated small MS4 outfalls. Show and identify all named Waters of the Commonwealth that receive discharges from each regulated small MS4 outfall.

C. Urbanized Area Information

Urbanized Area Names: – Provide the name(s) and urbanized area number(s) for each urbanized area in which your regulated small MS4s are located. To help you in answering this question, refer to the list at www.dep.state.pa.us, keyword: Stormwater.

D. Description of Receiving Waters

1. Name(s) of Receiving Water(s): – Identify all surface waters of the Commonwealth to which your regulated small MS4s discharge. Use the same USGS Topographical Survey quadrangle, or equivalent, map(s) that are used to show your regulated small MS4s. Maps are available from the USGS – U.S. Department of Interior website at: <http://store.usgs.gov/>.

NOTE: ALL REGULATED SMALL MS4s THAT DISCHARGE STORMWATER TO SURFACE WATERS THAT HAVE AN EXISTING OR DESIGNATED USE OF “EXCEPTIONAL VALUE,” “HIGH QUALITY” OR “EXCEPTIONAL VALUE WETLANDS” MUST BE COVERED BY AN INDIVIDUAL NPDES MS4 PERMIT.

2. For each receiving water body, indicate the *designated use(s) and existing use(s)*, as applicable. These are described in 25 Pa. Code Chapter 93, and can be found here:
 - i. Designated Uses: <http://www.pacode.com/secure/data/025/chapter93/chap93toc.html>.
 - ii. Existing Uses: <http://www.dep.state.pa.us/watersupply/>.
3. Indicate whether the receiving water body is in DEP’s “*Integrated Water Quality Monitoring and Assessment Report*”, as amended. This is the list of “impaired” waters according to DEP’s continuing surface water assessment program, which can be found here: <http://www.dep.state.pa.us/watersupply/>.
4. Indicate whether the receiving water body is subject to a TMDL. This information can be found on DEP’s website which provides a list of approved Total Maximum Daily Loads (TMDLs) at: http://www.dep.state.pa.us/watermanagement_apps/tmdl/.
5. TMDLs establish an allowable limit of pollutant (called a wasteload allocation) to control pollution discharges into impaired waters. The U.S. Environmental Protection Agency (EPA) web site also provides a list of approved TMDLs for Pennsylvania at: http://www.epa.gov/reg3wapd/tmdl/pa_tmdl/index.htm.
6. For each Receiving Water identified in the list, on your map of your regulated small MS4 system, label the most downstream outfall with a unique 3-digit number (i.e. 001 to 999) and show that number in this column.
7. Indicate the latitude in degrees, minutes, and seconds, of the outfall identified in column seven (7).
8. Indicate the longitude in degrees, minutes, and seconds, of the outfall identified in column eight (8).

E. Stormwater Management Program (SWMP)

MS4 Operations Plan for Each Minimum Control Measure

The NPDES MS4 General Permit requires permittees to implement a written stormwater management program designed to satisfy each of the six MCMs to protect water quality standards and to reduce the discharge of pollutants to the Maximum Extent Practicable (MEP). The Stormwater Management Program in Appendix A of the PAG-13 Authorization to Discharge shall be used to satisfy the requirement. In this section, you confirm that you will use DEP’s SWMP to meet this requirement for all six MCMs. If not, then you must apply for an Individual NPDES MS4 permit.

Since DEP is responsible for implementation of the statewide program for issuing NPDES Permits for Stormwater Discharges Associated with Construction Activities (NPDES Construction Permit), which includes implementation of post-construction stormwater management best management practices, you may rely on DEP’s program to satisfy all requirements under MCM #4 and all requirements in BMPs #1 through #3 under MCM #5. In Sections E(4)-(5) of the NOI, you will indicate whether you are relying on DEP’s program to satisfy all requirements under MCMs #4 and the requirements in BMPs #1 through #3 of MCM #5; or whether you will be operating your own program to meet all requirements under MCMs #4 and #5.

If your NOI is for a group of joint applicants, and one applicant is implementing one or more minimum control measure(s) on the other applicants' behalf, identify which applicant is responsible for implementing each measure. The same applies for elements to be implemented by others such as a county, a statewide association, or a watershed group; however, the permittee always has the ultimate responsibility for implementing each of the elements of this permit.

F. MS4 TMDL Plan for Discharges to Impaired Waters with a TMDL

For each regulated small MS4 that discharges stormwater into any portion of waters with applicable wasteload allocations in approved TMDLs at the time of submission of a complete NOI, permittees shall develop, submit to DEP for approval, and ensure implementation of a written MS4 TMDL Plan that is designed to achieve pollutant reductions consistent with the conditions and assumptions of the applicable wasteload allocations in the approved TMDL. An MS4 TMDL Plan consists of two components: an MS4 TMDL Strategy and MS4 TMDL Design Details. The MS4 TMDL Strategy must include a detailed discussion that demonstrates to the satisfaction of DEP that the MS4 TMDL Plan will satisfy the requirements in Subsections 1 and 2 below plus the requirements in Part C, Subpart A of the Authorization to Discharge. Permittees must submit an MS4 TMDL Strategy or a complete MS4 TMDL Plan with the NOI. MS4 TMDL Design Details must be submitted to DEP within one year of authorization to discharge under this permit for written approval by DEP. The complete MS4 TMDL Plan must satisfy the requirements in Subsections 1 and 2 below plus the requirements in Part C, Subpart A of the Authorization to Discharge, including final design details for the BMPs that will be implemented during the term of this permit. MS4 TMDL Plans must include a timeline (schedule) with milestones and upon approval the plan must be implemented as soon as practicable, and no later than according to the approved timeline. The timeline may extend across multiple permit terms.

If a regulated small MS4 discharges to an area within the area covered by a watershed or regional TMDL implementation plan, the MS4 TMDL Plan should consider incorporating pollutant control measures consistent with the TMDL implementation plan.

MS4 TMDL Plans, when required, should incorporate appropriate content from Non Point Source Implementation Plans (i.e. CWA Section 319 Plans), Watershed Restoration Strategy Plans, County Comprehensive Plans (Act 247 Plans) as well as other applicable resources. The calculated or reported pollutant removal benefits of your MS4 TMDL Plan may not include the pollutant removal benefits of any measures implemented by anyone as a condition of any other NPDES permit.

The MS4 TMDL Plan must result in measurable progress toward substantial reductions in the applicable pollutant loads specified in the applicable WLAs of the TMDLs. The timeline in the MS4 TMDL Plan must have physical pollutant removal measures installed on-the-ground in time for their successful operation to be documented in the annual report or progress report submitted in the third year of coverage under the permit. Additional measurable substantial progress with installation of physical pollutant removal measures must be documented in the reports submitted with the next successive renewal NOI or application for a renewal permit.

The MS4 TMDL Plan may include measures that reduce applicable pollutant loads consistent with the TMDL that were implemented between the time water quality assessments were completed for setting the applicable TMDLs and the date of the Approval of Coverage. Such measures must be located within the geographic area that drains to the permittee's regulated small MS4.

Both components of the MS4 TMDL Plan must be signed and sealed by a professional engineer holding a valid license in good standing from the Pennsylvania Department of State.

1. MS4 TMDL Control Measures

Permittees must develop, submit to DEP for approval, and ensure implementation of an MS4 TMDL Plan that is designed to achieve the pollution reduction requirements of the applicable wasteload allocations in the approved TMDL. Whenever possible, the TMDL Control Measures should be implemented in a manner consistent with the guidance provided by the Pennsylvania Stormwater Best Management Practices Manual (Document No. 363-0300-002) as amended and updated.

To help with the development of the MS4 TMDL Plan, the following paragraphs present nine example TMDL Control Measures for permittees to consider during preparation of the plan to achieve pollutant

reductions in the discharges from your regulated MS4s consistent with applicable wasteload allocations in approved TMDLs.

TMDL Control Measure 1. Establish and Protect Riparian Forest Buffers – restore vegetated buffer areas

- a. Inventory possible riparian forest buffer restoration sites
- b. Prioritize and select buffer restoration sites
- c. Establish and maintain riparian forest buffers utilizing DEP's Riparian Forest Buffer Guidance (Doc. No. 394-5600-001) and the Riparian Forest Buffer Toolkit (www.dep.state.pa.us, keyword: Stream ReLeaf.)
- d. Protect the riparian forest buffers by recording a riparian forest buffer easement or riparian forest buffer agreement
- e. Enact and enforce a riparian forest buffer ordinance. (A model aquatic buffer ordinance is available from EPA's website at: <http://www.epa.gov/owow/nps/ordinance/sitemap.htm>).
- f. Quantify, document, and periodically report the amount of new riparian forest buffers installed utilizing the Stream ReLeaf data sheets (www.dep.state.pa.us, keyword: Stream ReLeaf.)

TMDL Control Measure 2. Disconnection Program – Disconnect impervious areas from your regulated small MS4 system

- a. Survey and develop an inventory of directly connected roof leaders that discharge to your regulated small MS4 system
- b. Survey your regulated small MS4 for pavement disconnection opportunities
- c. Develop and implement a disconnection and retrofit program
- d. Enact and enforce an ordinance requiring disconnection and prohibiting direct roof connections
- e. Quantify, document, and periodically report the impervious area permanently disconnected from the regulated small MS4s.

TMDL Control Measure 3. Tree Planting – Plant trees within the area that drains to the regulated small MS4.

- a. Identify areas for possible tree planting to last a minimum of twenty (20) years.
Note: Guidance and grants are available through the TreeVitalize partnership <http://www.treevitalize.net/>
- b. Create a basic planting plan that includes:
 - i. A map that delineates each area within which tree-planting must be performed.
 - ii. A sketch or large map that provides the detailed planting plan.
 - iii. The species (and variety, if applicable) of each tree to be planted
 - iv. The location of overhead or underground utilities or obstructions (lamp posts, fire hydrants, water lines, sewer lines, etc.).
 - v. The width of the tree lawn if present, or the size of pavement openings where trees are to be planted (5ft x 5ft or 3ft x 10ft is recommended)
 - vi. Establish a tree maintenance program and provide for frequent care of the trees for the first three years.
 - vii. Trees with a caliper of 2 inches or greater measured 6 inches above the root collar are preferred for planting.
 - viii. Use the Conservation Reserve Enhancement Program Guidelines at <http://www.creppa.org/success.htm>. Click on "Landowner Guide to Success."

- c. Review the tree planting plan annually and update the plan as necessary to meet the objectives. Update the tree planting plan at least once during each permit term.
- d. Quantify, document, and periodically report on the tree planting program. Include the number of trees planted, the tree species, diameter of the trees, and location where they were planted.

TMDL Control Measure 4. Construct Recharge / Infiltration Facilities

- a. Evaluate locations for structural infiltration facilities including vegetative swales
- b. Construct recharge/infiltration BMPs (For examples refer to Chapter 6 of the Pennsylvania Stormwater Best Management Practices Manual)
- c. Quantify, document, and periodically report the volume permanently removed from your regulated small MS4 as a result of constructed recharge / infiltration facilities

TMDL Control Measure 5. Stormwater Basin Retrofits – Naturalize or modify for extended detention, and/or modify basins for increased infiltration

- a. Inventory basins within the urbanized areas
- b. Determine feasibility for retrofit or naturalization
- c. Prioritize and select basins for retrofits
- d. Retrofit at least one basin during the permit term
- e. Quantify, document, and periodically report the size and type of stormwater basin retrofits and the volume permanently removed from your regulated small MS4 as a result of the stormwater basin retrofits.

TMDL Control Measure 6. Restore Stream banks – Restore and/or stabilize degraded and eroded stream banks

- a. Inventory using the NRCS assessment tool available from the USDA's website at: <http://www.nrcs.usda.gov/technical/ecs/aquatic/svapfnl.pdf>.
- b. Prioritize and select segments for restoration / stabilization
- c. Perform stream bank restoration / stabilization
- d. Quantify, document, and periodically report the amount of stream bank restored / stabilized in linear feet. Count each stream bank separately.

TMDL Control Measure 7. Establish Green Infrastructure at facilities that are owned by the municipality and that drain to the regulated small MS4

- a. Establish a green roof.
- b. Establish rain gardens.
- c. Implement pervious pavement surfaces.
- d. Quantify, document, and periodically report the size and type of installed green infrastructure BMPs that discharge to your regulated small MS4.

TMDL Control measure 8. Develop and implement additional provisions to address TMDLs or a separate MS4 TMDL Stormwater Management Ordinance that:

- a. Satisfies the MS4 Stormwater Management Ordinance Checklist
- b. Includes volume and rate controls that produce equal or smaller values for discharge volumes and peak rates of flow than the values produced by the Control Guidelines in Chapter 3 of Pennsylvania Stormwater Best Management Practices Manual (these Control Guidelines also are in Sections 303 and 304 of the MS4 Stormwater Management Ordinance provided in this PAG-13 permit package).
- c. Quantify, document, and periodically report the projects and stormwater BMPs that discharge to your regulated small MS4s and that were installed in accordance with this ordinance. In your reports, show the annual volume of stormwater permanently removed from your regulated

small MS4s and the reduction in peak flow rates that result from these BMPs. Include supporting computations and analysis for the reported values.

TMDL Control Measure 9. Participate in an approved Trading and Offset Program, where applicable.

- a. Submit and obtain approval of a proposal for trading and offset, from DEP.
- b. Identify and negotiate for necessary credits
- c. Enter into a trading and offset contract

Guidance on methods to compute the water quality benefits of various interconnected BMPs can be found in Section 8.6 titled "Stormwater Quality Analysis," of the Pennsylvania Stormwater Best Management Practices Manual, Section 8.6, Stormwater Quality Analysis.

2. MS4 TMDL Plan Implementation Requirements

Permittees shall develop and submit for approval an MS4 TMDL Plan that achieves pollutant reductions consistent with assumptions and requirements of the applicable wasteload allocations in approved TMDLs. Permittees must report on progress with implementation of the MS4 TMDL Plan in the annual reports (for new permittees and all permittees with any portion of a regulated small MS4 discharging stormwater into the Chesapeake Bay Watershed) or progress reports (for renewal permittees with no portion of any regulated small MS4 discharging stormwater into the Chesapeake Bay Watershed). All measures needed to reduce the pollutant loads consistent with the applicable wasteload allocations in approved TMDLs shall be implemented as soon as practicable, in accordance with the schedule in the MS4 TMDL Plan. Implementation of all measures can be adaptive, iterative, and dynamic. The term "implement" includes any action that may be necessary for the permittee to ensure the proper operation and maintenance of all pollutant control measures identified in, or associated with, the MS4 TMDL Plan. The MS4 TMDL Plan shall be evaluated and updated by the permittee continuously, as necessary, based on its effectiveness in reducing pollutant loads in discharges from your regulated MS4.

Permittees shall report on the implementation of applicable MS4 TMDL Plans in the annual report or progress report to be submitted in year three of the permit term as well as with the next permit renewal application. The report shall include the reductions in pollutant load attained by implementation of the control measures and BMPs, broken down measure by measure and BMP by BMP. The report shall demonstrate that measurable progress toward meeting the required pollutant load reductions are being achieved and are consistent with the conditions and assumptions of the applicable TMDL. The report can demonstrate this by showing how measurable implementation progress is being made toward reducing pollutant loads as required by the applicable waste loads in the approved TMDL, in accordance with the implementation schedule in the MS4 TMDL Plan, and the estimated end date for ultimate attainment of the pollutant load reductions set forth in the applicable wasteload in the approved TMDL.

G. Discharges to the Chesapeake Bay

If any portion of your regulated small MS4 is located in and discharging to receiving watersheds draining to the Chesapeake Bay, then you must develop, submit to DEP for approval, and ensure implementation of a Chesapeake Bay Pollutant Reduction Plan in accordance with Part C(3) of the Authorization to Discharge. If you are required to develop, submit to DEP for approval, and ensure implementation of an MS4 TMDL Plan to meet a waste load allocation (WLA) for sediment, phosphorus, or nitrogen, as described in Part C(1) of the Authorization to Discharge, then you may rely on and incorporate into the Chesapeake Bay Pollutant Reduction Plan the portions of such MS4 TMDL Plans that address nitrogen, phosphorus, and sediment associated with existing stormwater discharges to receiving watersheds draining to the Chesapeake Bay. Your Chesapeake Bay Pollutant Reduction Plan must be submitted within 12 months of the effective date of your Approval of General Permit Coverage.

Your annual reports must include a summary of your progress with developing, submitting to DEP for approval, and ensuring implementation of your Chesapeake Bay Pollutant Reduction Plan. If you are required to develop, submit to DEP for approval, and ensure implementation of an MS4 TMDL Plan, then your annual report also must summarize your progress with the MS4 TMDL Plan in accordance with Section II.F.2 above.

H. Discharges to an Impaired Water without an Approved TMDL

For each regulated small MS4 that discharges stormwater into any receiving waters that are impaired, but do not have an approved TMDL, permittees shall ensure that new discharges from the permittee's regulated small MS4s do not cause or contribute to exceedances of water quality standards. Permittees must:

- a. identify outfalls that discharge to impaired waters;
- b. identify additional or modified BMPs in the SWMP to ensure that new discharges do not cause or contribute to the impairment; and
- c. implement such BMPs and report on the status of each.

For each outfall that discharges to impaired waters, permittees must list the outfall, the impairment, and the BMPs that will be added or modified to the SWMP to ensure that discharges from the regulated small MS4s will not cause or contribute to identified impairments. For outfalls that discharge stormwater that cannot be a contributor to the impairment of the receiving water, permittees must provide an explanation.

I. Stormwater Management Ordinance(s)

The SWMP requires permittees to adopt, implement, and enforce a stormwater management ordinance(s). Permittees must enact, implement, and enforce an ordinance from an Act 167 Plan approved by DEP in 2005 or later; or enact one of the model MS4 Stormwater Management Ordinances; or have an existing ordinance(s) that satisfies all applicable requirements in a completed and signed MS4 Stormwater Management Ordinance Checklist. This requirement must be satisfied no later than the end of the first year of coverage under this permit for new permittees. All permittees must indicate how and when these requirements will be/were met and report that implementation of a stormwater management ordinance(s) was/were completed in the first annual report or the first progress report.

Check the applicable box in Section I of the NOI and provide all additional information required.

J. Compliance History Review

Check the appropriate box in Section J of the NOI. If your answer is "No," no further information is needed in this block. If your answer is "Yes," then you must provide the requested information for each violated permit, order, regulation, or schedule of compliance.

K. Certification

The applicant must certify that the information contained in the NOI is true, accurate and complete. The NOI must be signed by either a principal executive officer or ranking elected official. For purposes of this section, a principal executive officer of a Federal agency includes:

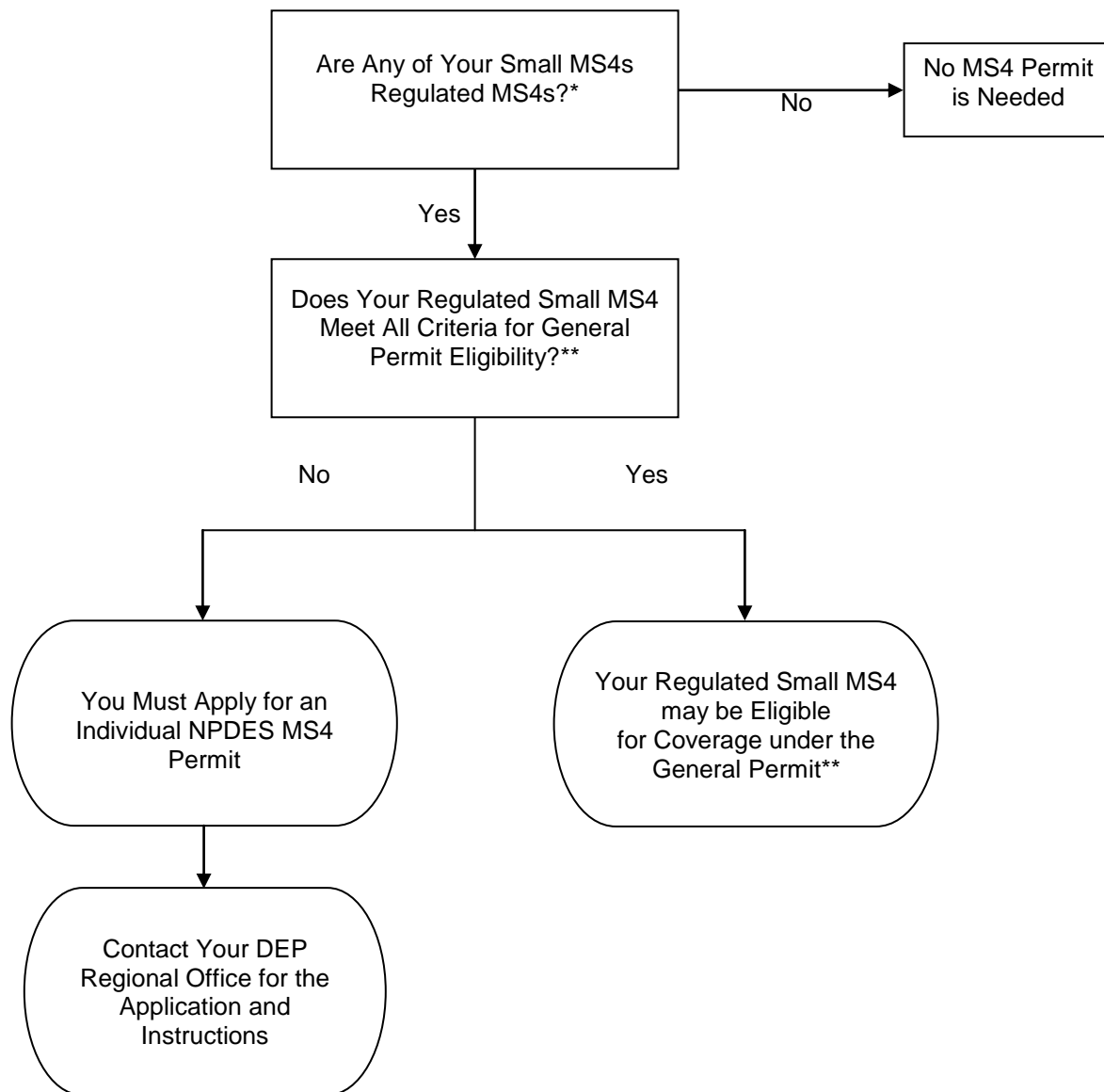
1. the chief executive officer of the agency, or
2. a senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., Regional Administrator of EPA).

For municipalities, DEP will accept the signature of any person duly authorized or delegated by the governing board of directors, supervisors or commissioners.

L. Periodic Reports

Throughout PAG-13, the words "periodic reports" or "periodically report" mean that for first term permittees and for all permittees with any portion of a regulated small MS4 discharging stormwater into the Chesapeake Bay Watershed, the permittee will provide all required information in annual reports. Renewal permittees with no portion of a regulated small MS4 discharging stormwater into the Chesapeake Bay Watershed, all required information will be provided in the periodic progress reports submitted in permit years one (1) and three (3), and in year five (5) with the renewal NOI or renewal application (also see Part B.3.d of the Authorization to Discharge).

Figure 1. Flow Chart to Determine Eligibility for Coverage Under Pennsylvania NPDES General Permit (PAG-13) Stormwater Discharges from a Regulated Small Municipal Separate Storm Sewer System (MS4)



(*) To determine if your small MS4 is regulated by these requirements, see the *Fact Sheet*, or the federal regulations at 40 CFR 122.26 – 123.35, or contact the DEP regional office. DEP has a list of the designated municipal and county MS4s—at www.dep.state.pa.us, keyword: Stormwater Management, then click on Permitting, or contact your regional DEP office.

(**) Please refer to the General Permit for other restrictions on the use of stormwater General Permit.

PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION
REGIONAL WATERSHED MANAGEMENT PROGRAM OFFICES

Table 1

Office	County Responsibility
<p><i>Southeast Office</i> - (484) 250-5970 Permit Coordinator 2 East Main Street Norristown, PA 19401</p>	Bucks, Chester, Delaware, Montgomery and Philadelphia
<p><i>Northeast Office</i> - (570) 826-2511 Permit Coordinator 2 Public Square Wilkes-Barre, PA 18701-1915</p>	Carbon, Lackawanna, Lehigh, Luzerne, Monroe, Northampton, Pike, Schuylkill, Susquehanna, Wayne and Wyoming
<p><i>Southcentral Office</i> - (717) 705-4700 Permit Coordinator 909 Elmerton Avenue Harrisburg, PA 17110</p>	Adams, Bedford, Berks, Blair, Cumberland, Dauphin, Franklin, Fulton, Huntingdon, Juniata, Lancaster, Lebanon, Mifflin, Perry and York
<p><i>Northcentral Office</i> - (570) 327-3636 Permit Coordinator 208 W. 3rd Street Williamsport, PA 17701</p>	Bradford, Cameron, Centre, Clearfield, Clinton, Columbia, Lycoming, Montour, Northumberland, Potter, Snyder, Sullivan, Tioga and Union
<p><i>Southwest Office</i> - (412) 442-4000 Permit Coordinator 400 Waterfront Drive Pittsburgh, PA 15222-4745</p>	Allegheny, Armstrong, Beaver, Cambria, Fayette, Greene, Indiana, Somerset, Washington and Westmoreland
<p><i>Northwest Office</i> - (814) 332-6945 Permit Coordinator 230 Chestnut Street Meadville, PA 16335-3481</p>	Butler, Clarion, Crawford, Elk, Erie, Forest, Jefferson, Lawrence, McKean, Mercer, Venango and Warren

NOI



COMMONWEALTH OF PENNSYLVANIA
 DEPARTMENT OF ENVIRONMENTAL PROTECTION
 BUREAU OF POINT AND NON-POINT SOURCE MANAGEMENT

NOTICE OF INTENT (NOI)

**FOR COVERAGE UNDER NPDES GENERAL PERMIT
 FOR STORMWATER DISCHARGES (PAG-13) FROM
 SMALL MUNICIPAL SEPARATE STORM
 SEWER SYSTEMS (MS4s)**

- (1) Please read the attached instructions carefully before completing this application.
- (2) If any of your regulated small MS4 discharges into "special protection waters" (or if your MS4 is otherwise ineligible to use PAG-13) do not complete this NOI; you must use an Individual NPDES MS4 Permit application.
- (3) Check the appropriate box if you are submitting this NOI for a RENEWAL of your current permit, or if this NOI is for a NEW permit:

Renewal Permit (if checked, please provide Permit Number) **PAG-13** _____
 OR
New Permit

A. Multi-Municipal Joint Application	
1.	Is this application being made jointly with other municipalities? <input type="checkbox"/> Yes <input type="checkbox"/> No If "Yes", please complete the information below
2.	Attach a completed and signed "Applicant Information for a Joint NPDES MS4 Authorization" for each joint permittee. Enter the total number of joint permittees: _____ A completed "Applicant Information for a Joint NPDES MS4 Authorization" is attached for each joint permittee. <input type="checkbox"/> Yes <input type="checkbox"/> No
3.	Attach to this NOI a map (or maps) to show the locations of the regulated small MS4s, the urbanized area boundaries, and the municipal boundaries of each of the joint permittees. Are the required maps attached to this NOI? <input type="checkbox"/> Yes <input type="checkbox"/> No
B. MS4 Operator Information	
1.	Name of MS4 Operator:
2.	Contact Person:
3.	Title/Role:
4.	Division: Department:
5.	Phone Number: Fax:
6.	E-mail:
7.	Mailing Address:
	Address Line 1:
	Address Line 2:
	City: State:
	Zip Code:

8.	<input type="checkbox"/> I have reviewed the conditions for General Permit Eligibility and I believe that the regulated MS4 included in this NOI satisfies the conditions.
9.	<input type="checkbox"/> Are all of the following map requirements met: USGS Topographical, or equivalent, maps that show municipal boundaries for all permittees listed in Sections A or B above are enclosed; and the maps marked to show the location of regulated MS4 outfalls; and the maps are marked to show and identify all named waters of the Commonwealth that receive discharges from each regulated MS4 outfalls.

C. Urbanized Area Information

Urbanized Area Name(s):	UA #(s):

D. Description of Receiving Waters (refer to the NOI instructions for more information).

List water bodies into which the regulated small MS4(s) discharge, their classification(s), uses, impairments, TMDL status, and location of the most downstream outfall.

1. Name of Waterbody	2.i. Designated Uses	2.ii. Existing Uses	3. 303(d) or 305(b) Listed? (Y/N)	4. TMDL ? (Y/N)	5. TMDL Parameter(s) List the Wasteload Allocation (WLA) and Load Allocation (LA) if applicable.	6. ID of Most Downstream Outfall - 3-digit number.	7. Latitude (° , ' , ")	8. Longitude (° , ' , ")
a.								
b.								
c.								
d.								
e.								
f.								
g.								
h.								
i.								
j.								
k.								
l.								

E. Stormwater Management Program (SWMP)		
<p>MS4 operators must implement a written SWMP with BMPs to meet six minimum control measures (MCMs), including measurable goals and a schedule, as part of their NOI. The SWMP in Appendix A of the Authorization to Discharge meets this requirement and must be implemented to satisfy eligibility for PAG-13.</p>		
<p>Check the boxes next to each Minimum Control Measure in the following table to confirm that the Stormwater Management Program contained in Appendix A of the General Permit will be followed. If the Program in Appendix A of the General Permit cannot be followed, this NOI cannot be used and you must apply for and Individual Permit using the MS4 Individual Permit Application. In the right-hand column, provide the names of the person(s) responsible for implementing the program for each Minimum Control Measure.</p>		
Minimum Control Measures	The MS4 Operator will implement the Minimum Control Measures as described in the <i>SWMP in the General Permit</i>	Name and telephone number of the principal person responsible for implementation.
The permittee will implement the SWMP in Appendix A of the Authorization to Discharge. You must check the box in the center column, and provide the information in the right-hand column.	<input type="checkbox"/>	
(1) Public Education and Outreach	<input type="checkbox"/>	
(2) Public Participation and Involvement	<input type="checkbox"/>	
(3) Illicit Discharge Detection and Elimination	<input type="checkbox"/>	
(4) Construction Site Stormwater Runoff Control, and (5) BMPs #1, #2, and #3 of the MCM for Post-Construction Stormwater Management in New Development and Redevelopment You must check one of the two boxes in the column to the right and fill-in the blanks as indicated.	<input type="checkbox"/> MCM #4.A: The permittee will rely on DEP's statewide program for issuing NPDES Permits for Stormwater Discharges Associated with Construction Activities to satisfy all requirements under MCM #4 and all requirements under BMPs #1 through #3 of MCM #5. In this case, the permittee is not required as a condition of this permit to implement any of the BMPs listed under MCM #4 nor any of the first three (3) BMPs listed under MCM #5 in Appendix A of the Authorization to Discharge. Note: The permittee may not issue any final approvals for development or redevelopment projects that require NPDES permits for discharges of stormwater from construction sites until after DEP or a delegated County Conservation District issues the NPDES Permit for Stormwater Discharges Associated with Construction Activities.	

	<input type="checkbox"/> MCM #4.B: The permittee is not relying on DEP's program for issuing NPDES Permits for Stormwater Discharges Associated with Construction Activities; therefore, the permittee must implement all of the BMPs listed under MCM #4 and BMPs #1, #2, and #3 of MCM #5 in Appendix A of the Authorization to Discharge.	Name of person responsible: _____ Telephone number: _____
(5) BMPs #4, #5, and #6 of the MCM for Post Construction Stormwater Management in New Development and Redevelopment	<input type="checkbox"/>	
(6) Pollution Prevention and Good Housekeeping for Municipal Operations and Maintenance	<input type="checkbox"/>	

F. MS4 TMDL Plan for Discharges to Impaired Waters with a TMDL

Additional Requirement to have a written MS4 TMDL Plan for Impaired Waters with an approved TMDL: If any of your regulated MS4s discharge stormwater into any portion of a receiving water with applicable wasteload allocations in an approved TMDL, you must develop, submit to DEP for approval, and ensure implementation of a written MS4 TMDL Plan that achieves the pollutant reductions consistent with the applicable TMDL. Refer to Section 2, Part C, of the Authorization to Discharge for the list of ten (10) components that shall be addressed in the MS4 TMDL Strategy component of the MS4 TMDL Plan, **which shall be submitted as a written attachment to this NOI.**

Are any of your regulated small MS4 discharges of stormwater to any portion of receiving waters with applicable waste load allocations in an approved TMDL. Yes No

If you answered yes above, then you must complete the remainder of this section.

Name and telephone number of the principal person responsible for preparation and implementation of the MS4 TMDL Plan.

Name: _____

Phone: _____

Check one of the following boxes to indicate how your MS4 TMDL Plan was developed:

- Your MS4 TMDL Plan implements and enforces the TMDL control measures from a watershed or regional TMDL Plan; or.
- You will develop, submit to DEP for approval, and ensure implementation of your own TMDL control measures for your MS4 TMDL Plan according to the guidance in Section II.F. of the NOI Instructions.

Signature and Seal by Professional Engineer for MS4 TMDL Plans

If an MS4 TMDL Plan is required, do the components submitted with this NOI include the signature and seal of a professional engineer with a valid license in good standing from the Pennsylvania Department of State as required?

Yes No

G. Discharges to the Chesapeake Bay

Are any of your regulated small MS4s located in or discharging to any receiving watersheds that drain to the Chesapeake Bay? Yes No

If you answered yes above, then within 12 months of the effective date of your Approval of Coverage, you must develop and submit to DEP for approval a Chesapeake Bay Pollutant Reduction Plan;

Your Chesapeake Bay Pollutant Reduction Plan may incorporate portions of MS4 TMDL Plans that address applicable waste load allocations (WLAs) for sediment, nitrogen, or phosphorus associated with existing stormwater discharges to watersheds that drain to the Chesapeake Bay as described in Part C(1) of the Authorization to Discharge. Will your Chesapeake Bay Pollutant Reduction Plan incorporate portions of any MS4 TMDL Plans?

Yes No

Signature and Seal by Professional Engineer for Chesapeake Bay Pollutant Reduction Plan

Indicate by checking the following box that your Chesapeake Bay Pollutant Reduction Plan will include the signature and seal of a professional engineer with a valid license in good standing from the Pennsylvania Department of State as required? Yes

H. Discharges to Impaired Waters without an approved TMDL

For each regulated small MS4 that discharges stormwater into any portion of a receiving water that is impaired, but does not have an approved TMDL, permittees shall ensure that new discharges from the permittee's regulated small MS4s do not cause or contribute to exceedances of water quality standards. Permittees must:

- a. identify outfalls that discharge to impaired waters;
- b. identify additional or modified BMPs in the SWMP to ensure that new discharges do not cause or contribute to the impairment; and
- c. implement such BMPs and report on the status of each.

For each outfall that discharges to impaired waters, list the outfall, the impairment, and the BMPs that will be added or modified to the SWMP to ensure that new discharges from your regulated small MS4 will not cause or contribute to the identified impairments. For outfalls that discharge stormwater that reasonably cannot be a cause or contributor to the impairment of the receiving water, provide an explanation.

I. Stormwater Management Ordinance

Indicate by checking one of the boxes below whether you have an existing ordinance from an Act 167 Plan approved by DEP in 2005 or later; or you plan to adopt an MS4 Stormwater Management Ordinance that corresponds to the checked box in E(4)-(5); or you have completed and attached an MS4 Stormwater Management Ordinance Checklist that corresponds to checked box in E(4)-(5).

The applicant will satisfy, one of the following (Check one and fill-in blanks where indicated.):

<p style="text-align: center;">F.1.</p> <p><input type="checkbox"/> <u>By the end of the first year of coverage under this permit, you will enact and implement either:</u> a) the MS4 Stormwater Management Ordinance corresponding to the checked box in E(4)-(5); or, b) an ordinance from an Act 167 Plan approved in 2005 or later; or, c) an ordinance that satisfies all applicable requirements on a completed and signed MS4 Stormwater Management Ordinance Checklist corresponding to the checked box in E(4)-(5).</p>	OR	<p style="text-align: center;">F.2.</p> <p><input type="checkbox"/> Already have enacted and implemented an Act 167 Stormwater Management Ordinance from an Act 167 Plan approved in 2005 or later. Provide the enactment date and number of your stormwater management ordinance</p> <p>Number: _____</p> <p>Date: _____</p>	OR	<p style="text-align: center;">F.3.</p> <p><input type="checkbox"/> The MS4 Stormwater Management Ordinance Checklist is completed, signed, and attached, and all applicable requirements are satisfied. If your ordinance already is enacted, provide the enactment date and number of your stormwater management ordinance</p> <p>Number: _____</p> <p>Date: _____</p>
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Fill in the Name and Telephone number of the principal person responsible.

Name

Telephone number

J. Compliance History Review

Has the applicant been in violation during the past 5 years of any permits issued by DEP, or any orders, regulations or schedules of compliance?

Yes No

If yes, list each permit, order, regulation, or schedule that is/was in violation and provide compliance status of the permitted activity (use additional sheets to provide information on all permits).

Brief Description of Non-Compliance:

Steps Taken to Return to Compliance and Dates Compliance Achieved:

K. Certification:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

Name and official title: (Please Print or Type name and title. Use corporate or professional seal as appropriate)

Signature: _____ Date Signed: _____



COMMONWEALTH OF PENNSYLVANIA
 DEPARTMENT OF ENVIRONMENTAL PROTECTION
 BUREAU OF POINT AND NON-POINT SOURCE MANAGEMENT

**NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
 GENERAL PERMIT (PAG-13) FOR STORMWATER DISCHARGES FROM
 SMALL MUNICIPAL SEPARATE STORM SEWER SYSTEMS (MS4s)**

		NOI CHECKLIST	
<p>You must complete the following list to confirm that all required information has been included. Place a check mark in the column provided for each item listed. Attach this checklist to the Notice of Intent (NOI) that you submit.</p> <p>Failure to provide all of the requested information will delay the processing of the NOI and may result in the NOI being placed ON HOLD or NO ACTION, or it will be considered withdrawn and the file closed.</p>			
	Item	Check if Included	DEP USE
Notice of Intent			
1.	a. Multi-Municipal Joint Application information, if applicable.	<input type="checkbox"/>	<input type="checkbox"/>
	b. MS4 operator(s) information and contact person(s).	<input type="checkbox"/>	<input type="checkbox"/>
	c. Name(s) of Urbanized Area(s) and area number(s)	<input type="checkbox"/>	<input type="checkbox"/>
	d. Name(s) of Receiving Water(s) and Watershed(s), designated and existing use(s) as described in 25 Pa. Code Chapter 93, 303(d) designation, if applicable, and TMDL parameter(s), if applicable.	<input type="checkbox"/>	<input type="checkbox"/>
	e. Stormwater Management Program (SWMP), including contact information for responsible person(s), and including a checkmark in the appropriate box in E(4)-(5).	<input type="checkbox"/>	<input type="checkbox"/>
	f. Determine whether an MS4 TMDL Plan for Discharges to Impaired Waters with an approved TMDL is required.	<input type="checkbox"/>	<input type="checkbox"/>
	g. Information regarding whether or not any part of your regulated small MS4 is located in or discharging to any receiving watersheds that drain to the Chesapeake Bay?	<input type="checkbox"/>	<input type="checkbox"/>
	h. Information on regulated small MS4 outfalls that discharge to impaired waters without an approved TMDL.	<input type="checkbox"/>	<input type="checkbox"/>
	i. Stormwater Management Ordinance Information.	<input type="checkbox"/>	<input type="checkbox"/>
	j. Compliance History Review.	<input type="checkbox"/>	<input type="checkbox"/>
	k. Certification with signature of official or individual authorized by governing body. If applicable, include a copy of the written authorization to sign the NOI.	<input type="checkbox"/>	<input type="checkbox"/>
Attachments to Notice of Intent			
2.	Notice of intent filing fee. (Check for \$500.00 dated within 10 days of NOI submittal date).	<input type="checkbox"/>	<input type="checkbox"/>
3.	Map: USGS topographical quadrangle showing the municipal boundaries for all permittees, the location of regulated MS4 outfalls, and all named Waters of the Commonwealth which receive discharges from regulated MS4 outfalls.	<input type="checkbox"/>	<input type="checkbox"/>
4.	MS4 Stormwater Management Ordinance Checklist, if applicable.	<input type="checkbox"/>	<input type="checkbox"/>
5.	A written MS4 TMDL Plan or written MS4 TMDL Strategy, if applicable, signed and sealed by a professional engineer holding a valid license in good standing from the Pennsylvania Department of State.	<input type="checkbox"/>	<input type="checkbox"/>
6.	Written MS4 TMDL Plan, if applicable, must show substantial measurable progress with physical pollutant control measures installed on-the-ground in time for their operation to be documented in the annual report or progress report submitted in the third year of coverage, plus additional progress in time to be reported with NOIs or applications for permit renewal.	<input type="checkbox"/>	<input type="checkbox"/>



APPROVAL OF GENERAL PERMIT COVERAGE

UNDER THE NPDES GENERAL PERMIT (PAG-13) STORMWATER DISCHARGES FROM SMALL MUNICIPAL SEPARATE STORM SEWER SYSTEMS (MS4s)

NPDES PERMIT NO: _____

In compliance with the provisions of the Clean Water Act, 33 U.S.C. Sections 1251 *et seq.* ("the Act") and Pennsylvania's Clean Streams Law, *as amended*, 35 P.S. Section 691.1 *et seq.*, the Pennsylvania Department of Environmental Protection (DEP) hereby approves coverage for the Notice of Intent (NOI) submitted by:

APPLICANT(S) (NAME AND ADDRESS):

WATERSHED(S):

to discharge stormwater to surface waters of the Commonwealth.

This approval to discharge is made subject to DEP's enclosed Authorization to Discharge Under the NPDES General Permit for Discharges of Stormwater from Small MS4s (PAG-13). **The Authorization is granted** based, in part, on information the permittee provided in the Notice Of Intent (NOI). **The information provided by the person seeking the authorization, including all appendices, attachments, plans and supporting documentation, is incorporated** by reference as a part of this Approval of General Permit Coverage and is enforceable as a condition of the authorization. If there is a conflict between the permit and the NOI, including any appendices, attachments, plans and other supporting documentation, the more environmentally stringent provisions apply.

APPROVAL FOR COVERAGE TO DISCHARGE UNDER THE GENERAL NPDES PERMIT WILL COMMENCE

_____ **AND WILL EXPIRE AT MIDNIGHT** _____

OR UPON TERMINATION OF THE GENERAL PERMIT IN WRITING BY DEP. TO CONTINUE DISCHARGING AFTER THE EXPIRATION DATE FOR COVERAGE UNDER THIS GENERAL PERMIT, AN ADMINISTRATIVELY COMPLETE AND ACCEPTABLE NOI MUST BE RECEIVED BY DEP NO LATER THAN 180 DAYS PRIOR TO THE COVERAGE EXPIRATION DATE. (SEE ITEM #6 ON PAGE 1 FOR FURTHER INFORMATION).

Approval of the General Permit Coverage authorized by:

Signature

Date

Regional Office
Department of Environmental Protection



COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF POINT AND NON-POINT SOURCE MANAGEMENT

AUTHORIZATION TO DISCHARGE

**UNDER THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
GENERAL PERMIT FOR DISCHARGES OF STORMWATER FROM
SMALL MUNICIPAL SEPARATE STORM SEWER SYSTEMS (MS4s)
PAG-13**

GENERAL PROVISIONS:

Dischargers of stormwater from regulated small municipal separate storm sewer systems (small MS4s), as defined in 40 CFR § 122.26(b)(16), are required under the federal stormwater regulations (40 CFR Part 122) and state regulations incorporating those federal requirements by reference (25 Pa. Code § 92a.3), to submit an application and obtain a National Pollutant Discharge Elimination System (NPDES) permit to discharge stormwater into surface waters of the Commonwealth of Pennsylvania.

This General Permit authorizes stormwater discharges subject to the provisions of the Clean Water Act, 33 U.S.C. Sections 1251 *et seq.*, Pennsylvania's Clean Streams Law, *as amended*, 35 P.S. Sections 691.1 *et seq.*, and 25 Pa. Code Chapter 92a.

Municipalities operating under this general permit have been either automatically designated as regulated by EPA pursuant to 40 CFR § 122.32(a)(1) or designated as regulated by DEP under 40 CFR § 122.32(a)(2).

The authorization to discharge stormwater is subject to the terms and conditions set forth in Parts A, B and C herein. This permit authorizes discharges from regulated small MS4s, as defined herein, to surface waters of the Commonwealth, when such discharges are composed entirely of stormwater as defined in this General Permit, except as otherwise provided herein. The permittee is required to submit reports to document the implementation of the Stormwater Management Program (SWMP), as set forth in Appendix A hereto, designed to reduce the discharge of pollutants from the regulated small MS4 to the Maximum Extent Practicable (MEP); and when required, progress with the development, implementation, and enforcement of an MS4 TMDL Plan consistent with an applicable wasteload allocations in an approved TMDL; and when required, progress with the development, submission to DEP for approval, and ensuring implementation of a Chesapeake Bay Pollutant Reduction Plan.

THE AUTHORITY GRANTED BY THIS GENERAL PERMIT IS SUBJECT TO THE FOLLOWING CONDITIONS:

1. DEP may, upon written notification, require any permittee authorized by this General Permit to apply for and obtain an Individual NPDES MS4 Permit. The notice from DEP shall include the following: (1) a brief statement of the reasons for this action, (2) an application form, (3) a statement setting a deadline for the permittee to file the application and (4) a statement that on the effective date of the individual NPDES permit, coverage under this General Permit shall automatically terminate. If a permittee fails to submit, in a timely manner, an Individual NPDES MS4 Permit application required by DEP under this paragraph, then the applicability of this permit to the permittee is automatically terminated at the end of the day specified for submittal of the application. Any interested person may petition DEP to take action under this paragraph.
2. Any permittee authorized to discharge by this General Permit may be excluded from the coverage of this General Permit by applying for an Individual NPDES MS4 Permit. The permittee shall submit to DEP an Individual NPDES MS4 Permit application on approved Pennsylvania Individual NPDES MS4 Permit application forms.
3. When an Individual NPDES MS4 Permit is issued to an owner or operator of a regulated small MS4 otherwise subject to this General Permit, the applicability of this General Permit to the Individual NPDES MS4 Permit is automatically terminated on the effective date of the Individual NPDES MS4 Permit.
4. This General Permit may be modified or revoked and reissued by DEP.
5. This General Permit shall expire 5 years from the date of its issuance. DEP shall publish a notice in the *Pennsylvania Bulletin* of the draft, renewed or reissued General Permit or of any amendments to this General Permit, and after a comment period, notice of the final, renewed, reissued or amended General Permit shall be published in the *Pennsylvania Bulletin*. The permittee shall be responsible for complying with the final renewed, reissued or amended General Permit

6. An NOI for renewal of coverage under this General Permit shall be received by DEP at least 180 days prior to the Coverage Expiration Date on the Approval for Coverage (unless written permission has been granted by DEP for submission at a later date). A request for renewal of coverage is to be made using the NOI form provided by DEP.
7. Permittees who submit a timely renewal application in accordance with paragraph 6 may continue to operate pursuant to the terms and conditions of this permit until this General Permit is renewed, modified or revoked and reissued.
8. DEP shall publish a notice in the Pennsylvania Bulletin of the draft renewed, modified or revised General Permit before it expires. After a comment period specified in the notice of draft permit, a notice of final renewal, modification, or reissuance of the General Permit shall be published in the Pennsylvania Bulletin.
9. No condition of this General Permit shall release the permittee from any responsibility or requirements under other federal or Pennsylvania environmental statutes or regulations.
10. Approval of coverage under this General Permit may be revoked by DEP if monitoring data indicate one or more toxic pollutants are, or are expected to be, discharged by the permittee. If there is evidence indicating potential or realized adverse impacts on water quality due to any stormwater discharge from a regulated small MS4 covered by this permit, the operator of such a discharge may be required to obtain an individual NPDES MS4 permit.
11. Timely submission of the Notice of Intent (NOI) and, if applicable, the MS4 TMDL Plan.
12. By agreeing to participate in this General Permit, the permittee agrees to enact and implement; either an appropriate MS4 Stormwater Management Ordinance; an Ordinance from an applicable Act 167 Stormwater Management Plan approved by DEP in 2005 or later; or an ordinance(s) that satisfies all applicable requirements in a completed and signed MS4 Stormwater Management Ordinance Checklist.
13. By agreeing to participate in this General Permit, the permittee agrees to fully implement and enforce to the Maximum Extent Practicable the Stormwater Management Program (outlined in Part A, Section 2 below), and if required an MS4 TMDL Plan (outlined in Part C below) consistent with the conditions, assumptions and any applicable Waste Load Allocation defined in TMDLs, that is designed to reduce the discharge of pollutants from the permittee's regulated small MS4 to meet applicable requirements, to protect water quality, and to satisfy the appropriate water quality requirements of the federal Clean Water Act, the Pennsylvania Clean Streams Law, and regulations promulgated thereto.

GENERAL PERMIT ELIGIBILITY:

This permit authorizes the discharge of stormwater from eligible small MS4s defined at 40 CFR §122.26(b)(16). This includes small MS4s designated as regulated under 40 CFR §122.32(a)(1) and 40 CFR §122.32(a)(2). The operator of the regulated small MS4 is eligible to discharge under this permit if all of the following conditions are met:

1. The regulated MS4 is not large or medium MS4s as defined in 40 CFR §122.26(b)(4) or (7);
2. The regulated MS4 is located fully or partially in an urbanized area as determined by the latest Decennial Census by the Bureau of Census at the time this General Permit is issued;
3. The permittee submits an administratively complete and acceptable Notice of Intent and obtains written authorization from the Department.
4. The permittee is not implementing a local or tribal Qualifying Local Program (QLP) pursuant to 40 CFR § 122.44(s). Permittees currently operating under this general permit that wish to propose a QLP shall submit a complete written application for an Individual NPDES MS4 Permit together with complete documentation of their proposed Qualifying Local Program.
5. The permittee has no discharges from its regulated small MS4s to or is not located in waters of the Commonwealth, including wetlands, that have an existing or designated use that is classified as "Special Protection" under 25 Pa. Code Chapter 93 of DEP's regulations.
6. The regulated MS4 does not, and shall not, discharge hazardous pollutants, toxics or any other substance which, because of its quantity, concentration or physical, chemical or infectious characteristics, may cause or contribute to an increase in mortality or morbidity in either an individual or the total population or pose a substantial present or future hazard to human health or the environment when discharged into waters of the Commonwealth.

7. Individually, or in combination with other similar discharges, the regulated MS4 does not, and shall not, have the potential to be contributors to pollution which DEP determines is more appropriately controlled under an individual permit to ensure compliance with the Clean Water Act, the Clean Streams Law or regulations promulgated thereunder.

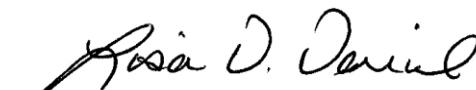
GENERAL PERMIT COVERAGE AND LIMITATIONS:

1. The following are authorized discharges:
 - a. Stormwater discharges. This permit authorizes stormwater discharges to surface waters of the Commonwealth from regulated small MS4s, except as excluded in Section 2 below.
 - b. Non-stormwater discharges. The following categories of non-stormwater discharges or flows are authorized by this permit unless the permittee or DEP has identified them as significant contributors of pollutants to the regulated small MS4 or its discharges:
 - i. discharges or flows from fire fighting activities;
 - ii. discharges from potable water sources including dechlorinated water line and fire hydrant flushing;
 - iii. irrigation water and landscape drainage;
 - iv. diverted stream flows;
 - v. uncontaminated pumped ground water;
 - vi. uncontaminated water from foundation and footing drains;
 - vii. air conditioning condensation;
 - viii. springs;
 - ix. water from crawl space pumps;
 - x. water from lawn watering;
 - xi. individual residential car washing;
 - xii. flows from riparian habitats and wetlands; and
 - xiii. dechlorinated swimming pool discharges. (clean, no filter backwash)
2. Limitations on Coverage: This permit does not authorize any of the following:
 - a. Discharges that are mixed with sources of non-stormwater unless such non-stormwater discharges are in compliance with a separate NPDES permit, or are determined not to be a significant contributor of pollutants to surface waters of the Commonwealth (as per section 1(b) herein).
 - b. Stormwater discharges associated with industrial activity as defined in 40 CFR §122.26(b)(14)(i)-(ix) and (xi).
 - c. Stormwater discharges associated with construction activity as defined in 40 CFR §122.26(b)(14)(x) or 40 CFR §122.26(b)(15).
 - d. Stormwater discharges currently covered under another NPDES permit.
 - e. Discharges that contain hazardous pollutants, toxics or any other substance which, because of its quantity, concentration or physical, chemical or infectious characteristics, may cause or contribute to an increase in mortality or morbidity in either an individual or the total population or pose a substantial present or future hazard to human health or the environment when discharged into waters of the Commonwealth.
 - f. Discharges that, individually or in combination with other similar discharges, are or have the potential to be, a contributor to pollution, which is more appropriately controlled under an individual permit.
 - g. MS4 systems where any portion of the discharges would be to impaired waters with an applicable and approved TMDL wasteload allocation (WLA) unless the permittee has an approved MS4 TMDL Plan.
 - h. Discharges that are not, or shall not be, in compliance with the terms or conditions of this General Permit.
 - i. Discharges where the applicant has failed and continues to fail to comply, or has shown a lack of ability or intention to comply, with a regulation, permit, schedule of compliance, or order issued by DEP.

- j. Discharges that do not, or shall not, result in compliance with applicable effluent limitations or water quality standards.
- k. Discharges from an MS4 which DEP determines require an individual NPDES permit to ensure compliance with the Clean Water Act, the Clean Streams Law or regulations promulgated there under.
- l. Discharges that may adversely affect a Pennsylvania or federal endangered or threatened species, or its critical habitat.
- m. Discharges from an MS4 where an NPDES permit has been terminated or denied.

COVERAGE UNDER THIS GENERAL PERMIT (PAG # 13) IS ISSUED: 3/16/13, AND SHALL EXPIRE ON: 3/15/18.

**STORMWATER
NPDES GENERAL PERMIT
(PAG-13) ISSUED BY**



**DIRECTOR
BUREAU OF POINT AND NON-POINT SOURCE MANAGEMENT**

PART A

STORMWATER MANAGEMENT PROGRAM

The Stormwater Management Program is contained at Appendix A hereto, which is incorporated by reference herein. The permittee shall implement, enforce and report on such activities related to the Stormwater Management Program which is designed to reduce the discharge of pollutants from its regulated small MS4 to the Maximum Extent Practicable, to protect water quality, and to satisfy the appropriate water quality requirements of the federal Clean Water Act, the Pennsylvania Clean Streams Law, and regulations promulgated thereto.

The Stormwater Management Program in Appendix A requires enactment and implementation of one of the following: (1) adoption of the MS4 Stormwater Management Ordinance; (2) adoption of an Ordinance from an applicable Act 167 Stormwater Management Plan approved by DEP in 2005 or later; or (3) an ordinance(s) that satisfies all applicable requirements in a completed and signed MS4 Stormwater Management Ordinance Checklist.

1. DEFINITIONS

Applicant: Refers to the owner or operator of a regulated small municipal separate storm sewer system seeking to discharge under, and pursuant to, the terms of this General Permit.

Best Management Practices (BMPs): Schedules of activities, prohibitions of practices, structural controls (e.g., infiltration trenches), design criteria, maintenance procedures, and other management practices to prevent or reduce pollution to the waters of the Commonwealth. BMPs include Erosion and Sedimentation Control Plans, Post Construction Stormwater Management Plans, MS4 TMDL Plans, Stormwater Management Act Plans, and other treatment requirements, operating procedures and practices to control runoff, spillage or leaks, sludge or waste disposal, drainage from raw material storage, and methods to reduce pollution, to recharge groundwater, to enhance stream base flow and to reduce the threat of flooding and stream bank erosion.

Better Site Design (BSD): An approach to residential and commercial development that, when properly conducted, can simultaneously reduce pollutant loads, conserve natural areas, save money, and increase property values. BSD promotes three main goals for new development sites: (1) to reduce the amount of impervious cover, (2) to increase the amount of natural lands set aside for conservation, and (3) to better integrate stormwater treatment systems on-site. Green Infrastructure techniques like green roofs, rain gardens, and vegetated swales can be used in BSD to manage stormwater runoff and increase the amount of local green space. Also, reducing the overall scale of streets, driveways, setbacks, parking spaces, and lot sizes are effective methods of reducing impervious cover.

<http://cfpub.epa.gov/npdes/greeninfrastructure/information.cfm#glossary>

Clean Water Act: The Federal Water Pollution Control Act, also known as the Clean Water Act (CWA), as amended, 33 U.S.C. §§ 1251, et. seq.

Control Measure: As used in this permit refers to any BMP in the MS4 Stormwater Management Program, the MS4 TMDL Plan or any other method used to prevent or reduce the discharge of pollutants to waters of the Commonwealth.

Consistent with the TMDL: Implementing measures as soon as practicable to make measurable progress in substantially reducing the applicable pollutant loads specified in the applicable WLA of the TMDL, and ultimately achieving the pollutant reductions required in the WLA through implementation of measures in accordance with an implementation timeline contained in the MS4 TMDL Plan.

Department: The Department of Environmental Protection (DEP)

Designated uses: Those uses specified in 25 Pa. Code §§ 93.4(a) and 93.9a – 93.9z for each water body or segment whether or not they are being attained.

Director: The Secretary of the Department of Environmental Protection or any authorized employee thereof.

Dry Weather: For required outfall inspections, dry weather is a continuous time interval without stormwater producing events that immediately follows an initial 48 hour period with no stormwater producing events. (**NOTE:** For additional information regarding dry weather, see Chapter 11 of *Illicit Discharge Detection and Elimination: A Guidance Manual for Program Development and Technical Assessments* [CWP, October 2004]. <http://cfpub.epa.gov/NPDES/stormwater/idde.cfm>.)

Existing uses: Those uses actually attained in the water body on or after November 28, 1975, whether or not they are included in the water quality standards.

Illicit Connection: Any physical connection to a separate stormwater drainage system that conveys illicit discharges into the system and/or is not authorized or permitted by the local authority.

Illicit Discharge: Any discharge (or seepage) to a municipal separate storm sewer that is not composed entirely of stormwater. This does not refer to discharges authorized under an NPDES permit (other than the NPDES permit for discharges from the regulated small MS4); certain allowable non-stormwater discharges described in the EPA regulations, NPDES MS4 permit or the MS4 permittee's ordinance; and discharges resulting from fire fighting activities. Examples of illicit discharges include dumping of motor vehicle fluids, household hazardous wastes, grass clippings, leaf litter, animal wastes, or unauthorized discharges of sewage, industrial waste, restaurant wastes, or any other non-stormwater waste into a separate stormwater drainage system. Illicit discharges can be accidental or intentional.

Load Allocation (LA): The portion of a surface water's loading capacity that is assigned or allocated to existing and future nonpoint sources and natural quality (25 Pa Code § 96.1).

Low Impact Development (LID): A set of site design approaches and small-scale stormwater management practices that promote the use of natural systems for infiltration, evapotranspiration, and reuse of rainwater. LID can be applied to new development, urban retrofits, and revitalization projects. LID utilizes design techniques that infiltrate, filter, evaporate, and store runoff close to its source. Rather than rely on costly large-scale conveyance and treatment systems, LID addresses stormwater through a variety of small, cost-effective landscape features located on-site. <http://cfpub.epa.gov/npdes/greeninfrastructure/information.cfm#glossary>

Maximum Extent Practicable (MEP): A technology-based discharge standard established in the CWA at §402(p)(3)(B)(iii) that requires NPDES MS4 permittees to optimize reductions in stormwater pollutants on a location-by-location basis by minimizing pollutant loads in stormwater discharges and maximizing technically achievable and cost-effective water quality improvements. MEP as used in this program also includes the requirement under the Pennsylvania Clean Streams Law to prevent pollution from changes in stormwater rate, volume, and temperature associated with alteration of the land. The MEP standard requires the development, implementation, and enforcement of measures including BMPs, control techniques, system design, engineering methods, and other provisions that DEP determines to be appropriate for the control of such pollutants. MEP is an iterative, dynamic, flexible standard that the permittee shall evaluate and update continuously, as necessary, to better tailor or expand the program based on its effectiveness in reducing pollutant discharge load.

Measurable Goals: Best Management Practice design objectives or goals that quantify the progress of program implementation and the performance of the chosen BMPs. They are objective markers or milestones that can be used to track the progress and effectiveness of BMPs in reducing pollutants to the MEP.

Municipal Separate Storm Sewer: A conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, manmade channels, or storm drains), which is all of the following:

- (1) owned or operated by a state, city, town, borough, township, county, district, association or other public body (created under state law) having jurisdiction over disposal of sewage, industrial wastes, stormwater or other wastes,
- (2) designed or used for collecting or conveying stormwater,
- (3) not a combined sewer, and
- (4) not part of a Publicly Owned Treatment Works as defined at 40 CFR § 122.2.

Municipal Separate Storm Sewer System (MS4): All separate storm sewers that are defined as "large" or "medium" or "small" municipal separate storm sewer systems pursuant to 40 CFR §§ 122.26(b)(18), or designated as regulated under 40 CFR § 122.26(a)(1)(v).

Municipality: Any county, city, borough, town, township, school district, or any institution or any authority created by one or more of the aforementioned.

MS4 TMDL Plan: A plan that is required for a regulated small MS4 that discharges stormwater into a waterbody with an approved applicable wasteload allocation (WLA) in a TMDL. The MS4 TMDL Plan shall detail measures that will be implemented to make measurable progress in substantially reducing the applicable pollutant loads specified in the applicable WLA of the TMDL, as soon as practicable, consistent with the TMDL. In addition, the MS4 TMDL Plan shall include a timeline, with milestones, that specifies when the pollutant load reductions set

forth in the WLA will be attained. Implementation of the MS4 TMDL Plan may be phased, in accordance with the timeline, and can be adaptive, iterative and dynamic. The MS4 TMDL Plan shall be evaluated and updated by the permittee continuously, as necessary. The term "implement" includes any action that may be necessary for the permittee to ensure the proper operation and maintenance of all pollutant control measures identified in, or associated with, the MS4 TMDL Plan.

National Pollutant Discharge Elimination System (NPDES): A permit issued under 25 Pa. Code Chapter 92a (relating to National Pollutant Discharge Elimination System permitting, monitoring and compliance) for the discharge or potential discharge of pollutants from a point source to surface waters.

New Permittee: Any municipality that has been designated as a regulated small MS4 and has not previously obtained coverage under PAG-13 or obtained an Individual NPDES MS4 Permit.

NOI: The Notice of Intent for Coverage under the NPDES General Permit for Discharges from Small Municipal Separate Storm Sewer Systems.

Non-structural BMP: Actions that involve management and source controls such as: (1) Policies and ordinances that provide requirements and standards to direct growth to identified areas, protect areas such as wetlands and riparian areas, maintain and/or increase open space, provide buffers along water bodies, minimize impervious surfaces, and minimize disturbance of soils and vegetation; (2) policies or ordinances that encourage infill development in higher density urban areas, and areas with existing storm sewer infrastructure; (3) education programs for developers and the public about minimizing water quality impacts; (4) other measures such as minimizing the percentage of impervious area after development, use of measures to minimize directly connected impervious areas, and source control measures often thought of as good housekeeping, maintenance, and spill prevention.

Outfall: A "Point Source" as defined by 40 CFR § 122.2 is the point where an MS4 discharges stormwater to other surface waters of this Commonwealth. This does not include open conveyances connecting two municipal separate storm sewers, or pipes, tunnels or other conveyances which connect segments of the same stream and are used to convey waters of the Commonwealth (40 CFR § 122.26 (b) (9)).

Owner or operator: The owner or operator of any "facility" or "activity" subject to regulation under the NPDES program.

Permittee: Refers to the owner or operator of a regulated small municipal separate storm sewer system seeking to discharge under, and pursuant to, the terms of this General Permit, and thereby agreeing to fully comply with all terms set forth therein. Permittees assume all responsibility for meeting conditions of coverage under this General Permit.

Point Source: As defined by 25 Pa. Code § 92a.2, any discernible, confined, and discrete conveyance, including but not limited to, any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated aquatic animal production facility, concentrated animal feeding operation, vessel or other floating craft, from which pollutants are or may be discharged.

Pollutant: Any contaminant or other alteration of the physical, chemical, biological, or radiological integrity of surface water which causes or has the potential to cause pollution as defined in section 1 of The Clean Streams Law, 35 P.S. § 691.1.

Pollution: Shall be construed to mean contamination of any waters of the Commonwealth such as will create or is likely to create a nuisance or to render such waters harmful, detrimental or injurious to public health, safety or welfare, or to domestic, municipal, commercial, industrial, agricultural, recreational, or other legitimate beneficial uses, or to livestock, wild animals, birds, fish or other aquatic life, including but not limited to such contamination by alteration of the physical, chemical or biological properties of such waters, or change in temperature, taste, color or odor thereof, or the discharge of any liquid, gaseous, radioactive, solid or other substances into such waters. The department shall determine when a discharge constitutes pollution, as herein defined, and shall establish standards whereby and wherefrom it can be ascertained and determined whether any such discharge does or does not constitute pollution as herein defined. The Clean Streams Law, 35 P.S. § 691.1.

Regulated Small MS4: Any small MS4 that is covered by the federal Phase II stormwater program, either through automatic nationwide designation under 40 CFR § 122.32(a)(1) (via the Urbanized Area criteria) or by designation on a case-by-case basis by DEP pursuant to 40 CFR § 122.32(a)(2). "Regulated small MS4s" are a sub-set of "small MS4s."

Riparian Forest Buffer (Riparian Buffer): An area of permanent vegetation consisting of native trees, shrubs, forbs and grasses along surface water that is maintained in a natural state or sustainably managed to protect and enhance water quality, stabilize stream channels and banks, and buffer land use activities from surface waters.

Section 303(d) Listed Waters: Stream segments placed on a list when, based on existing and readily available data and/or information, the technology-based effluent limitations required by the federal Clean Water Act, more stringent effluent limitations, and other pollution control requirements are not sufficient to implement an applicable water quality standard and a TMDL is needed.

Small Municipal Separate Storm Sewer System (Small MS4): All separate storm sewers that are:

- (1) Owned or operated by the United States, a State, city, town, borough, county, parish, district, association, or other public body (created by or pursuant to State law) having jurisdiction over disposal of sewage, industrial wastes, stormwater, or other wastes, including special districts under State law such as a sewer district, flood control district or drainage district, or similar entity.
- (2) Not defined as "large" or "medium" municipal separate storm sewer systems pursuant to 40 CFR §§122.26(b)(4) and (7), or designated under 40 CFR § 122.26(a)(1)(v).
- (3) This term includes systems similar to separate storm sewer systems in municipalities, such as systems at military bases, large hospitals or prison complexes, and highways and other thoroughfares.

Storm Sewershed: The catchment area that drains into the storm sewer system based on the surface topography in the area served by the storm sewer.

Stormwater: Runoff from precipitation, snow melt runoff and surface runoff and drainage. "Stormwater" has the same meaning as "Storm Water."

Stormwater Management Program (SWMP): A comprehensive program prepared by the applicant and approved by DEP to manage the quality of stormwater discharged from the municipal separate storm sewer system. Permittees are required to develop, implement, and enforce a SWMP designed to reduce the discharge of pollutants from the regulated small MS4s to the MEP, to protect water quality and quantity, and to satisfy the appropriate water quality requirements of the Pennsylvania Clean Streams Law and the CWA and regulations promulgated thereto. Permittees using the NPDES MS4 General Permit (PAG-13) are required to implement the SWMP in Appendix A of the Authorization to Discharge.

Structural BMP: Storage practices including, but not limited to, wet ponds and extended-detention outlet structures; filtration practices such as grassed swales, sand filters and filter strips; and infiltration practices such as infiltration basins and infiltration trenches.

Surface Waters: Perennial and intermittent streams, rivers, lakes, reservoirs, ponds, wetlands, springs, natural seeps and estuaries, excluding water at facilities approved for wastewater treatment such as wastewater treatment impoundments, cooling water ponds and constructed wetlands used as part of a wastewater treatment process.

Total Maximum Daily Load (TMDL): The sum of individual wasteload allocations for point sources, load allocations for nonpoint sources, a margin of safety, and natural background. TMDLs can be expressed in terms of mass per time, toxicity or other appropriate measures.

Urbanized Area (UA): Land area comprising one or more places (central place(s)) and the adjacent densely settled surrounding area (urban fringe) that together have a residential population of at least 50,000 and an overall population density of at least 1,000 people per square mile, as defined by the United States Bureau of the Census and as determined by the latest available decennial census. The UA outlines the extent of automatically regulated areas. UA maps are available at: <http://www.epa.gov/npdes/stormwater/urbanmaps> or at: <http://www.epa.gov/enviro/html/em/index.html>

Wasteload Allocation (WLA): The portion of a surface water's loading capacity that is allocated to existing and future point source discharges.

Water Quality Criteria: Numeric concentrations, levels or surface water conditions that need to be maintained or attained to protect existing and designated uses.

Water Quality Standards: The combination of water uses to be protected and the water quality criteria necessary to protect those uses.

Waters of the Commonwealth: Any and all rivers, streams, creeks, rivulets, impoundments, ditches, water courses, storm sewers, lakes, dammed water, ponds, springs and all other bodies or channels of conveyance of surface and underground water, or parts thereof, whether natural or artificial, within or on the boundaries of this Commonwealth.

2. EFFLUENT LIMITATIONS AND OTHER REQUIREMENTS FOR PAG-13

- a. The permittee shall implement, enforce and report on the Stormwater Management Program (SWMP) as set forth in Appendix A, designed to reduce the discharge of pollutants from the regulated small MS4s to the MEP, to protect water quality and quantity, and to satisfy the appropriate water quality requirements of the Clean Water Act, the Pennsylvania Clean Streams Law, and regulations promulgated thereto.
- b. The SWMP shall include Best Management Practices (BMPs) to comply with the following six minimum control measures (MCMs) in the following areas:
 1. Public Education and Outreach on Stormwater Impacts
 2. Public Involvement/Participation
 3. Illicit Discharge Detection and Elimination
 4. Construction Site Stormwater Runoff Control
 5. Post-Construction Stormwater Management (PCSM) in New and Re-Development Activities
 6. Pollution Prevention/Good Housekeeping for Municipal Operations
- c. The SWMP as set forth in Appendix A of this permit contains DEP's approved approach for satisfying each of the six MCMs. The SWMP in Appendix A describes each MCM and the permit requirements, including BMPs and measurable goals. Permittees operating under this General Permit shall implement the SWMP in Appendix A in its entirety. Any permittee that chooses not to use the SWMP in Appendix A shall submit an Individual NPDES MS4 Permit application that contains a proposed written SWMP that meets the regulatory requirements.
- d. New permittees shall enact and implement within the first year of permit coverage, either an appropriate MS4 Stormwater Management Ordinance; an Ordinance from an applicable Act 167 Stormwater Management Plan approved by DEP in 2005 or later; or an ordinance(s) that satisfies all applicable requirements in a completed and signed MS4 Stormwater Management Ordinance Checklist. The permittee must satisfy these requirements in accordance with the information provided by the permittee in the Notice of Intent.

Renewal permittees must continue to maintain, update, implement, and enforce a Stormwater Management Ordinance that satisfies all applicable requirements.
- e. The permittee shall ensure that its SWMP, including its stormwater management ordinance(s), is designed to prevent increased loadings of pollutants and to not cause or contribute to a violation of water quality standards by any discharges from its regulated small MS4s (40 CFR 122.4(i) and 40 CFR 122.44(d)(1)).
- f. The permittee shall develop and maintain adequate legal authorities to implement all parts of this general permit, including the attached SWMP.
- g. The permittee shall maintain adequate funding and staffing to implement and manage all provisions of the attached SWMP.
- h. Sharing responsibility
 1. Implementation of one or more of the minimum control measures may be shared with another entity, or the other entity may fully take over implementation of the measure. Because the permittee is responsible for meeting all permit conditions regardless of its delegations to other entities, the permittee should take steps to ensure that:
 - i. The other entity, in fact, implements the control measures in the regulated small MS4 area;
 - ii. The particular control measures as implemented by the other entity, or components of control measures, are at least as protective of water quality as the corresponding permit requirement.
 - iii. The other entity agrees to implement the control measures on behalf of the permittee. The agreement between the parties shall be documented in writing and retained by the permittee with the SWMP and records for this general permit.

2. The permittee shall perform reasonable oversight and the permittee remains responsible for compliance with the obligations of this General Permit if any other entity fails to implement any of the control measures (or any components thereof).
 - i. The permittee shall submit reports to the Department as described in Part B, Section 3.d. below.

PART B

STANDARD CONDITIONS

1. RESPONSIBILITIES

- a. **Duty to Comply.** The permittee shall comply with all terms and conditions of this General Permit. Any permit non-compliance constitutes a violation of the Pennsylvania Clean Streams Law and the federal Clean Water Act and is grounds for enforcement action, permit termination, revocation and reissuance, modification or denial of a permit or permit renewal. Financial distress does not relieve the permittee of the terms and conditions of this General Permit.
- b. **Penalties for Violations of Permit.** The permittee may be subject to criminal and/or civil penalties for violations of the terms and conditions of this General Permit under Section 602 and 605 of the Clean Streams Law, 35 P.S. Sections 691.602 and 691.605, and under the Clean Water Act as specified in 40 CFR Sections 122.41(a)(2) and (3).
- c. **Need to Halt or Reduce Activity Not a Defense.** The permittee may not use as a defense in an enforcement action that it would have been necessary to halt or reduce the permitted activity to maintain compliance with the conditions of this General Permit.
- d. **Penalties and Liability.** Nothing in this General Permit may be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties to which the permittee is or may be subject under Section 311 of the CWA (33 U.S.C. §1321) or Section 106 of the Comprehensive Environmental response, Compensation, and Liability Act, 42 U.S.C. § 9606.
- e. **Periodic report (periodic reports, periodically report):** First term permittees and all permittees with any portion of a regulated small MS4 discharging stormwater into the Chesapeake Bay Watershed shall submit all required information in annual reports. Renewal permittees with no portion of a regulated small MS4 discharging stormwater into the Chesapeake Bay Watershed shall provide all required information in periodic progress reports submitted in permit years one (1), three (3), and with the renewal NOI or renewal application in year five (5) (also see Part B.3.d).
- f. **Property Rights.** The issuance of this General Permit does not convey any property rights of any sort, nor any exclusive privileges, nor does it authorize any injury to private property nor any invasion of personal rights, nor any infringement of Federal, State or local laws or regulations.
- f. **Severability.** The provisions of this General Permit are severable. If any provision of this General Permit or the application of any provision of this General Permit to any circumstance is held invalid, the application of such provision to other circumstances and the remainder of this General Permit shall not be affected thereby.
- g. **Other Laws.** Nothing in this General Permit may be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties established pursuant to any applicable State law or regulation under authority preserved by Section 510 of the Clean Water Act.
- h. **Right of Entry.** Pursuant to Sections 5(b) and 305 of the Pennsylvania Clean Streams Law (35 P.S. §§ 691.5(b) and 691.305), 25 Pa. Code Chapter 92a, section 1917-A of the Administrative Code, section 308 of the CWA and 40 CFR § 122.41 (i), the permittee shall allow an authorized representative of EPA or DEP, upon the presentation of credentials and other documents, as may be required by law, to:
 - i. Enter upon the permittee's premises where a regulated activity is located or conducted or where records must be kept under the conditions of this General Permit;
 - ii. Have access to and copy at reasonable times, any records that must be kept under the terms and conditions of this General Permit;
 - iii. Inspect any facilities or equipment (including monitoring and control equipment), practices or operations regulated or required under this General Permit;
 - iv. Sample or monitor any substances or parameters, including the discharge of stormwater, at any location within the regulated small MS4.
- i. **Penalties for Falsification of Reports.** Section 309(c)(4) of the Clean Water Act provides that any person who knowingly makes any false material statement, representation, or certification in any record or other

document submitted or required to be maintained under this General Permit, including reports of compliance or non-compliance shall, upon conviction, be punished by a fine of not more than \$10,000, or by imprisonment for not more than 2 years or by both. In addition, criminal sanctions are set forth for false swearing and unsworn falsification at 18 Pa. C.S. §§ 4903-4904.

- j. **Penalties for Falsification of Monitoring Systems.** The Clean Water Act provides that any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under this General Permit shall, upon conviction, be punished by fines and imprisonment described in Section 309 of the Clean Water Act. In addition, criminal sanctions are set forth for false swearing and unsworn falsification at 18 Pa. C.S. §§ 4903-4904.
- k. **Test Procedures.** With the exception of the field screening conducted under the Illicit Discharge Detection and Elimination measure, wherever monitoring or sampling may be required, it shall be conducted according to test procedures approved under 40 CFR Part 136, unless other test procedures have been specified in the Authorization to Discharge or have been approved by DEP in writing.
- l. **Removed Substances.** Solids, sludge, filter backwash, or other pollutants removed in the course of treatment or control of wastewaters or drinking water, implementation of BMPs, or operating or maintaining the regulated small MS4, shall be managed and disposed of in accordance with the requirements of the Solid Waste Management Act, 35 P.S. § 6018.101, *et seq.*, and the Clean Streams Law, 35 P.S. §§ 691.1 *et seq.*, and in a manner such as to prevent any pollutant in such materials from adversely affecting the environment.
- m. **BMP Implementation and Facilities Construction, Operation and Maintenance.** The permittee shall properly design, build, operate, and maintain all facilities and systems of treatment and control, including BMPs and any stormwater pollution prevention or management plans, which are installed or used by the permittee to achieve compliance with the conditions of this General Permit. The permittee shall ensure that BMPs are planned, designed, implemented, and maintained to minimize or eliminate the impacts of stormwater runoff to the maximum extent practicable for BMPs associated with the Stormwater Management Program and to reduce the discharge of pollutants consistent with applicable TMDLs for BMPs associated with approved MS4 TMDL Plans. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures and requires the operation of backup or auxiliary facilities, BMPs, or similar systems, installed or implemented by a permittee only when necessary to achieve compliance with the conditions of this General Permit.
- n. **Adverse Impact.** The permittee shall take all reasonable steps to minimize or prevent any discharge in violation of this General Permit that has a reasonable likelihood of adversely affecting human health or the environment.
- o. **Monitoring Requirement.** The Department may require monitoring of an individual discharge as may be reasonably necessary in order to characterize the nature, volume or other attributes of that discharge or its sources. If the permittee is required to develop, submit to DEP for approval, and ensure implementation of an MS4 TMDL Plan pursuant to Condition C.1. herein, the permittee shall conduct monitoring of the BMPs and other measures undertaken pursuant to such section in order to demonstrate that measurable progress toward meeting the pollutant load reductions is being achieved consistent with the TMDL.

2. MANAGEMENT REQUIREMENTS

a. **Permit Modification, Termination, or Revocation and Reissuance**

1. This General Permit may be modified, suspended, revoked, reissued, or terminated during its term for any of the causes specified in 25 Pa. Code Chapters 92a and 102, as applicable.
2. The Department may modify, revoke, suspend, or terminate previously issued coverage under this General Permit and require the stormwater discharger to apply for and obtain an Individual NPDES MS4 Permit in accordance with 25 Pa. Code Chapters 92a and 102, as applicable.
3. The filing of a request by the permittee or co-permittee for a permit or coverage modification, revocation, reissuance, or termination, or a notification of planned changes or anticipated noncompliance, does not eliminate any existing permit conditions.
4. Permit modification or revocation shall be conducted according to 25 Pa. Code Chapters 92a and 102, as applicable.

b. Duty to Provide Information

1. The permittee shall furnish to DEP, within a reasonable time, any information that DEP may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this General Permit or coverage approved under this General Permit or to determine compliance with this General Permit.
2. The permittee shall furnish to DEP, upon request, copies of records that are required to be kept under the conditions of this General Permit.
3. When the permittee becomes aware of a failure to submit any relevant facts; of the existence of incorrect information in the Notice of Intent, or in any other report to DEP; the permittee shall promptly submit documents to correct such facts or information.
4. The permittee shall give advance notice to DEP of any planned physical alterations or additions to the regulated small MS4 which could, in any way, substantially affect the quality and/or quantity of stormwater discharged from the regulated small MS4.

c. Operation and Maintenance Requirements. The Stormwater Management Program (Appendix A), MS4 stormwater management ordinance(s), and MS4 TMDL Plan, if required, shall include provisions to ensure that proper operation and maintenance is performed on all stormwater BMPs and all pollutant reduction BMPs that discharge through the regulated small MS4. The requirement to perform proper operation and maintenance of BMPs that discharge through the regulated small MS4s applies to the owners and operators of all such BMPs, including the permittee.

3. MONITORING, REPORTING, AND RECORD KEEPING

The permittee shall evaluate program compliance, the appropriateness of identified BMPs, and progress toward achieving identified measurable goals.

a. Records of field investigations. When the permittee conducts monitoring of illicit discharges pursuant to MCM #3, samples and measurements taken shall be representative of the monitored activity. Records of monitoring information shall include:

1. The date, exact place, and time of sampling, measurements, or observations;
2. The name(s) of the individual(s) who performed the sampling, measurements, or observations;
3. The date(s) when sample analyses were performed;
4. The names of the individuals who performed the analyses;
5. The analytical techniques or methods used; and
6. The results of such analysis.

b. Retention of Records. The permittee shall retain copies of the documentation related to the SWMP developed in accordance with this General Permit for a minimum of three years, and until at least one year after coverage under this General Permit terminates. The permittee shall retain all records of all monitoring information, copies of all reports required by this General Permit, and records of all data used to complete the NOI until at least one year after coverage under this General Permit terminates. In addition, the permittee shall retain on site, at all times, a complete copy of the NOI, this General Permit, and any authorizations received from DEP pursuant to this General Permit, until at least one year after coverage under this General Permit terminates. This period may be explicitly modified by alternative provisions of this General Permit or extended by request of DEP at any time.

c. Signatory Requirements

1. All reports and NOI applications required by the permit and other information requested by DEP shall be signed and certified by a principal executive officer or ranking elected official or by a duly authorized representative of that person. A person is a duly authorized representative only if:
 - i. The authorization is made in writing by a person described above and submitted to DEP with the reports.
 - ii. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity, such as the position of manager, operator, superintendent, or position of equivalent responsibility or an individual or position having overall

responsibility for environmental matters for the organization. (A duly authorized representative may be either a named individual or any individual occupying a named position).

2. **Changes in Authorized Individuals or Positions.** If an authorization for an individual or a position to submit reports to DEP is no longer accurate because a different individual or position has responsibility for the overall operation of the regulated small MS4, a new authorization satisfying the above requirements shall be submitted to DEP prior to, or together with, any reports, information, or applications to be signed by the newly authorized representative.

3. **Progress Reports Shall Include the Following Signed and Dated Certification:**

"I certify under penalty of law that the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

d. Periodic Reports (Annual Reports and Progress Reports)

1. New permittees and all permittees with any portion of a regulated small MS4 discharging stormwater into the Chesapeake Bay Watershed shall submit annual reports to DEP reporting on SWMP activities, Chesapeake Bay Pollutant Reduction Plan activities, and MS4 TMDL Plan activities performed during the preceding permit year. The report shall be in the format provided by the Department. Report Forms are available on DEP's website at <http://www.dep.state.pa.us/>, Keyword: Stormwater.
2. Renewal permittees with no portion of a regulated small MS4 discharging stormwater into the Chesapeake Bay Watershed shall submit Progress Reports to DEP documenting the SWMP and MS4 TMDL Plan activities that were performed during the preceding reporting time interval.
3. Permittees shall submit the appropriate report form, available on the DEP's website.
4. The reports shall include information regarding (but not limited to):
 - i. Status of compliance with the conditions of this General Permit and progress towards meeting the measurable goals of each MCM;
 - ii. Status of progress towards achieving the statutory requirements of reducing the discharge of pollutants to the MEP and complying with water quality standards.
 - iii. Assessment of the appropriateness of the BMPs;
 - iv. Steps to be taken to address any deficiencies in the BMPs or other aspects of the SWMP developed by the permittee;
 - v. Results of information collected and analyzed during the reporting period;
 - vi. Summary of stormwater activities planned during the next reporting cycle;
 - vii. Any proposed changes to the permittee's SWMP, including changes to BMPs, measurable goals, or responsible parties;
 - viii. Notices, intergovernmental agreements, and other relevant documents if the permittee is relying on another governmental entity to satisfy any of its permit obligations;
 - ix. Progress with implementation of the MS4 TMDL Plan, including a summary of implementation and monitoring data of all control measures and of all BMPs implemented in connection with the MS4 TMDL Plan;
 - x. For new permittees, a letter signed by a municipal official, municipal engineer or the municipal solicitor as an attachment to the first year report certifying the enactment of either an ordinance from an Act 167 Plan approved by the Department in 2005 or later; enactment of the appropriate MS4 Stormwater Management Ordinance; or enactment of an ordinance(s) that satisfies all applicable requirements in a completed and signed MS4 Stormwater Management Ordinance Checklist.
5. All Reports shall be submitted to the appropriate DEP Regional Office.
6. The deadlines for submission of Annual Reports and Progress Reports are as follows:
 - a. Annual Reports no later than 90 days following the end of each permit year.
 - b. Progress Reports no later than 60 days following the end of permit years one (1) and three (3). In

year five (5) the report shall be submitted with the NOI for renewal of this general permit or with an application for renewal in the case of individual permits.

4. TRANSFER OF OWNERSHIP OR CONTROL

This General Permit is not transferable to any person except after notice to DEP.

- a. In the event of any pending change in control or ownership of the regulated small MS4 from which the authorized discharges emanate, the permittee shall notify DEP by letter of such pending change at least 30 days prior to the change in ownership or control. The letter shall be accompanied by the NOI and a written agreement between the existing permittee and the new owner or operator stating that the existing permittee shall be liable for violations of the General Permit up to and including the date of coverage transfer and that the new owner or operator shall be liable for permit violations under the General Permit after that date.
- b. After receipt of the required documentation, DEP shall notify the existing permittee and the new owner or controller of its decision concerning approval of the transfer. Such requests shall be deemed approved unless DEP notifies the applicant otherwise within 30 days.
- c. DEP may require the new operator to apply for and obtain an Individual NPDES MS4 Permit.

5. TERMINATION OF COVERAGE

- a. **Notice of Termination.** Where all stormwater discharges from a regulated small MS4 that are authorized by this General Permit are eliminated, the operator of the regulated small MS4 may submit a letter that is signed in accordance with Part B.3.c. (signatory requirements) of this General Permit certifying that:

"Under penalty of law, I hereby certify that all MS4 discharges that are authorized by this NPDES General Permit have been eliminated. I understand that by submitting this notice of termination I am no longer authorized to discharge stormwater from the regulated small MS4 under this General Permit, and that discharging stormwater or pollutants to surface waters of the Commonwealth is unlawful under the Clean Water Act and Clean Streams Law where the discharge is not authorized by an NPDES MS4 permit."
- b. **Addresses.** All letters certifying discharge termination are to be sent to the appropriate regional office of DEP.

PART C

OTHER CONDITIONS

1. TOTAL MAXIMUM DAILY LOAD (TMDL) REQUIREMENTS:

If the regulated small MS4 discharges stormwater into any portion of a receiving water with applicable wasteload allocations (WLAs) in approved TMDLs, the permittee shall implement an approved MS4 TMDL Plan that is designed to achieve pollutant reductions consistent with the applicable wasteload allocations (WLAs) in the TMDLs. When an MS4 TMDL Plan is required, that MS4 TMDL Plan must be implemented according to the schedule in the approved plan.

For each regulated small MS4 that discharges stormwater into any portion of a receiving water with applicable wasteload allocations in approved TMDLs, permittees shall develop, submit to DEP for approval, and ensure implementation of a written MS4 TMDL Plan that is designed to achieve pollutant reductions consistent with the conditions and assumptions of the applicable wasteload allocations in the approved TMDLs. An MS4 TMDL Plan consists of two components: an MS4 TMDL Strategy and MS4 TMDL Design Details. The MS4 TMDL Strategy must include a narrative discussion of how the MS4 TMDL Plan will satisfy the requirements in Subsections a through c below. MS4 TMDL Design Details must be submitted to DEP within one year of the effective date of the approval of coverage under this permit for written approval by DEP. The complete MS4 TMDL Plan must satisfy the requirements in Subsections a through d below, including final design details for the BMPs that will be implemented during the term of this permit. MS4 TMDL Plans must include a timeline (schedule) with milestones and upon approval the plan must be implemented as soon as practicable, and no later than according to the approved timeline.

a. MS4 TMDL Plan for Impaired Waters with a TMDL

The MS4 TMDL Plan must be consistent with the conditions and assumptions of any applicable waste load allocation(s) (WLAs) in approved TMDLs, and it must include implementation of pollutant control measures that reduce pollutants in discharges from the regulated small MS4s as required by the wasteload allocations in the TMDLs. (Note: The MS4 TMDL Plan is in addition to the Stormwater Management Program (SWMP) in Appendix A required to satisfy the six mandatory MCMs).

The permittee's progress with implementation of the MS4 TMDL Plan must be fully described in every periodic report (see Part B.3.d of the Authorization to Discharge).

b. MS4 TMDL Plan, Required Contents

The MS4 TMDL Plan shall reduce pollutants in discharges from the regulated small MS4 as required by applicable wasteload allocations in approved TMDLs. The permittee must develop, submit to DEP for approval, and ensure implementation of the MS4 TMDL Plan in accordance with the approved timeline.

MS4 TMDL Plans shall include:

- i. The Title of TMDL or TMDL(s);
- ii. A list of the watershed name(s) and the eight-digit Hydrologic Unit Code (HUC) for the areas that discharge through the regulated MS4s to water bodies with TMDLs;
- iii. A list of the pollutant(s) and Waste Load Allocations (WLAs) assigned to each regulated small MS4 in each municipality covered by the NOI;
- iv. For each applicable TMDL, a list all of the municipalities subject to the TMDL within the area of the same eight digit HUC;
- v. For each applicable TMDL, a list of all the counties subject to the TMDL within the area of the same eight digit HUC;
- vi. Allocated pollutant loadings established in each applicable TMDL;
- vii. Reductions in pollutant loads (pounds or percent) necessary to meet each applicable TMDL or WLA;
- viii. For each regulated small MS4 outfall that discharges to waters with TMDLs, and for each TMDL, list all of the control measures and BMPs that will be implemented and reported to meet the TMDL.

Include a brief analysis to explain and justify the control measures and BMPs that were selected for implementation.

- ix. Permittees must include an analysis to show that implementation of the MS4 TMDL Plan, including the selected control measures and BMPs, will reduce the pollutant loads consistent with the applicable WLAs established in approved TMDLs. Permittees must include a timeline with milestones. Implementation of the MS4 TMDL Plan may be phased, in accordance with the timeline, and can be adaptive, iterative, and dynamic to show measurable progress toward meeting pollutant load reductions. Permittees must evaluate and update MS4 TMDL Plans as necessary, based on effectiveness in reducing pollutant discharge loads to meet approved TMDLs and applicable WLAs. MS4 TMDL Plans must include a process for evaluating control measures and BMPs, implementation efforts undertaken to date, and any changes made to the control measures or BMPs to obtain greater reductions in pollutant loadings from the outfalls of the regulated MS4s.
- x. Additional information deemed necessary by DEP or by the permittee for addressing the TMDL.

Information for TMDLs (including HUC numbers) can be found at www.depweb.state.pa.us, keyword: TMDL.

c. Signature and Seal by Professional Engineer for MS4 TMDL Plans

MS4 TMDL Strategies and an MS4 TMDL Plans must be signed and sealed by a professional engineer holding a valid license in good standing from the Pennsylvania Department of State.

d. Implementation Requirements

Permittees shall develop, submit to DEP for approval, and ensure implementation of an MS4 TMDL Plan that is consistent with the applicable WLAs in approved TMDLs and that is designed to achieve the pollutant reductions established by applicable WLAs in the TMDLs. The term “implement” includes any action that may be necessary for the permittee to ensure the proper operation and maintenance of all pollutant control measures identified in, or associated with, the MS4 TMDL Plan. Permittees shall report on implementation of the MS4 TMDL Plan in each periodic report submitted under this General Permit. All pollutant control measures needed to reduce the pollutant load consistent with the TMDL shall be implemented as soon as practicable, in accordance with the MS4 TMDL Plan’s timeline, to make measurable progress in substantially reducing the applicable pollutant loads. Implementation of all measures can be adaptive, iterative, and dynamic. The MS4 TMDL Plan shall be evaluated and updated by the permittee as necessary, based on its effectiveness in reducing pollutant loads in discharges from the regulated small MS4s.

The MS4 TMDL Plan shall demonstrate that the required pollutant load reductions will be achieved, consistent with the TMDL, and the Plan must be implemented as soon as practicable. The MS4 TMDL Plan can demonstrate this by showing how measurable implementation progress will be made in substantially reducing applicable pollutant loads specified in the WLA, in accordance with the implementation timeline, including attainment of applicable milestones, along with the proposed end date for ultimate attainment of the pollutant load reductions set forth in the WLA.

Permittees shall report on progress with implementation of the MS4 TMDL Plan in all periodic reports and in the final report submitted with the next renewal application. Permittees must include the reductions in pollutant loads attained by implementation of control measures or BMPs, broken down measure by measure or BMP by BMP. Permittees must have physical pollutant removal measures installed on-the-ground in time for their successful operation to be documented in the periodic report or the progress report submitted at the end of the third year of coverage under this permit. Additional measurable substantial progress with installation of physical pollutant removal measures must be documented in the reports submitted with the next successive renewal NOI or application for a renewal permit.

2. DISCHARGES TO IMPAIRED WATERS WITHOUT A TMDL:

For each regulated small MS4 that discharges stormwater into any portion of a receiving water that is impaired, but does not have an approved TMDL, permittees shall ensure that new discharges from the permittee’s regulated small MS4s do not cause or contribute to exceedances of water quality standards. Permittees must:

- a. identify outfalls that discharge to impaired waters;
- b. identify additional or modified BMPs in the SWMP to ensure that new discharges do not cause or contribute to the impairment; and

- c. implement such BMPs and report on the status of each.

Permittees shall report on progress with implementation of the additional or modified BMPs in the each periodic report.

3. CHESAPEAKE BAY POLLUTANT REDUCTION PLANS:

Permittees with regulated small MS4s located in and discharging to receiving watersheds draining to the Chesapeake Bay:

- a. Shall within 12 months of the effective date of your Approval of General Permit Coverage, develop and submit to the Department for approval a Chesapeake Bay Pollutant Reduction Plan, including a schedule, to implement BMPs to reduce nitrogen, phosphorus, and sediment associated with existing stormwater discharges into regulated small MS4s discharging to receiving waters tributary to the Chesapeake Bay;
- b. The Chesapeake Bay Pollutant Reduction Plan required under this permit shall include a narrative description of the estimated area, including impervious cover, draining to the regulated small MS4, which may be based upon existing documents or data, such as zoning maps. This narrative description should identify areas where municipal infrastructure upgrades are planned and include an evaluation of the suitability for incorporation of green infrastructure, ESD, or LID BMPs into the planned municipal infrastructure upgrades. Where feasible, such practices should be incorporated into the municipal infrastructure upgrades and the included in the Chesapeake Bay Pollutant Reduction Plan BMP implementation schedule.
- c. The Chesapeake Bay Pollutant Reduction Plan required under this permit shall include BMPs that are designed to achieve reductions of nitrogen, phosphorus, and sediment consistent with the goals and objectives of the Pennsylvania Chesapeake Watershed Implementation Plan and must be signed and sealed by a professional engineer holding a valid license in good standing from the Pennsylvania Department of State;
- d. In the development of the Chesapeake Bay Pollutant Reduction Plan, the permittee shall evaluate and incorporate into the plan a combination of TMDL control measures listed in Section II.F of the NOI Instructions;
- e. Upon approval by DEP, the permittee shall ensure implementation of the Chesapeake Bay Pollutant Reduction Plan consistent with the approved schedule; and
- f. In the annual report to the Department required under Part B of this permit, the permittee shall include a list of BMPs implemented and associated reductions and a narrative description of the progress with development, submission to DEP for approval, and ensuring implementation of the Chesapeake Bay Pollutant Reduction Plan.
- g. Where the permittee is required to develop, submit to DEP for approval, and ensure implementation of an MS4 TMDL Plan to meet a WLA for nitrogen, phosphorus, or sediment as described in Part C(1) of this permit, the permittee may rely on and incorporate the portions of such MS4 TMDL Plan that address nitrogen, phosphorus, and sediment associated with existing stormwater discharges into the Chesapeake Bay Pollutant Reduction Plan.



PAG-13 Appendix A Stormwater Management Program

This Appendix A contains the specific Best Management Practices (BMPs) and Measurable Goals that make up each permittee's Stormwater Management Program (SWMP) and that are required for the permittee to comply with this NPDES Municipal Separate Storm Sewer System (MS4) General Permit. There are six Minimum Control Measures (MCMs), which are required by Federal Regulations. Within each MCM, Pennsylvania is requiring the implementation of several BMPs under this General Permit. Associated with each BMP are Measurable Goals, which represent the means by which the permittees' accomplishments shall be reported and evaluated. For supplemental information on the six MCMs, permittees are encouraged to refer to www.depweb.state.pa.us, keyword: Stormwater. For a national perspective on guidance for setting measurable goals, please refer to EPA's publication "Measurable Goals Guidance for Phase II Small MS4s," available from EPA's website: <http://cfpub.epa.gov/npdes/stormwater/measurablegoals/index.cfm>.

Permittees implementing an approved local or tribal Qualifying Local Program (QLP) pursuant to 40 CFR 122.44(s) are not eligible to use General Permit (PAG-13). Permittees currently operating under this General Permit who wish to propose a local or tribal QLP shall submit a complete written application for an Individual NPDES MS4 Permit together with complete documentation of their proposed local or tribal QLP.

MCM #1: Public Education and Outreach on Stormwater Impacts

The following are the requirements for MCM #1 that are included in the Federal Regulations:

- *Implement a public education program to distribute educational materials to the community or conduct equivalent outreach activities about the impacts of stormwater discharges on water bodies and the steps that the public can take to reduce pollutants in stormwater runoff (40 CFR Part 122.34(b)(1)(i)).*

The following requirements, Best Management Practices (BMPs) and Measurable Goals are to be implemented and achieved:

BMP #1: Develop, implement and maintain a written Public Education and Outreach Program.

Measurable Goal: For new permittees a Public Education and Outreach Program (PEOP) shall be developed and implemented during the first year of coverage under this General Permit and shall be re-evaluated each permit year thereafter and revised as needed. For renewal permittees, the existing PEOP shall be reviewed and revised as necessary. The permittee's PEOP shall be designed to achieve measurable improvements in the target audience's understanding of the causes and impacts of stormwater pollution and the steps they can take to prevent it.

Recommendation: Refer to the EPA document, "[Getting In Step, A Guide for Conducting Watershed Outreach Campaigns](#)" (EPA 841-B-03-002, December, 2003), for guidance on developing and implementing the PEOP.

BMP #2: Develop and maintain lists of target audience groups that are present within the areas served by your regulated small MS4s. In most communities, the target audiences shall include residents, businesses (including commercial, industrial and retailers), developers, schools, and municipal employees.

Measurable Goal: For new permittees, the lists shall be developed within the first year of coverage under the permit and reviewed and updated as necessary every year thereafter. For renewal permittees, the lists shall continue to be reviewed and updated annually.

Recommendation: Utilize databases or spreadsheets to record and track this information and to allow for easy identification and creation of mailing lists easily retrievable.

BMP #3: You must annually publish at least one issue of a newsletter, a pamphlet, a flyer, or a web site that includes general stormwater educational information, a general description of your Stormwater Management Program, and/or information about your stormwater management activities. The list of publications and the content of the publications must be reviewed and updated at least once during each year of permit coverage. Publications should include a list of references (or links) to refer the reader to additional information (e.g., PA DEP and US EPA stormwater websites, and any other sources that will be helpful to readers). You must implement at least one of the following alternatives:

- a. Publish and distribute in printed form a newsletter, a pamphlet or a flyer containing information consistent with this BMP.
- b. Publish educational and informational items including links to DEP's and EPA's stormwater websites on your municipal website.

Measurable Goals: For new permittees, stormwater educational and informational items shall be produced and published in print and/or on the Internet within the first year of permit coverage. In subsequent years (and for renewal permittees), the list of items published and the content in these items shall be reviewed, updated, and maintained annually. Your publications shall contain stormwater educational information that addresses one or more of the 6 MCMs.

Recommendation: There are numerous example educational resources available from the sources listed at: www.depweb.state.pa.us, keyword: Stormwater. Periodically you should review and consider distributing or republishing stormwater information available from DEP, EPA and other sources. Your stormwater materials can be published in print format or electronically on the internet. Permittees can partner with other MS4s to meet this BMP.

BMP #4: Distribute stormwater educational materials and/or information to the target audiences using a variety of distribution methods, including but not limited to: displays, posters, signs, pamphlets, booklets, brochures, radio, local cable TV, newspaper articles, other advertisements (e.g., at bus and train stops/stations), bill stuffers, posters, presentations, conferences, meetings, fact sheets, giveaways, storm drain stenciling.

Measurable Goal: All permittees shall select and utilize at least two distribution methods in each permit year. These are in addition to the newsletter and website provisions of BMPs #3 and #4.

Recommendations: Abundant educational resources and examples are available from numerous sources (see www.depweb.state.pa.us, keyword: Stormwater) that can be adapted for use, including the DEP brochure titled "When It Rains, It Drains." Since school districts frequently cross MS4 boundaries, seek out watershed groups or other qualified service providers to help assist and/or implement school education on behalf of the group of permittees. Permittees also can partner with other permittees to jointly arrange for school education.

MCM #2: Public Involvement / Participation

The following are the requirements for MCM #2 that are included in the Federal Regulations:

- *Comply with applicable state and local public notice requirements when implementing a public involvement / participation program (40 CFR Part 122.34(b)(2)(i)).*

The following requirements, Best Management Practices (BMPs) and Measurable Goals are to be implemented and achieved by MS4 permittees in Pennsylvania:

BMP #1: Develop, implement and maintain a written Public Involvement and Participation Program (PIPP) which describes various types of possible participation activities and describes methods of encouraging the public's involvement and of soliciting the public's input.

Measurable Goal: New permittee's PIPP shall be developed and implemented during the first year of coverage under this General Permit. All permittees shall re-evaluate the PIPP each permit year and revise as needed. Your PIPP shall include, but not be limited to:

- a. Opportunities for the public to participate in the decision-making processes associated with the development, implementation, and update of programs and activities related to this General Permit.
- b. Methods of routine communication to groups such as watershed associations, environmental advisory committees, and other environmental organizations that operate within proximity to the permittee's regulated small MS4s or their receiving waters.
- c. Making your periodic reports available to the public on your website, at your municipal offices, or by US Mail upon request.

BMP #2: Prior to adoption of any ordinance required by this General Permit, provide adequate public notice and opportunities for public review, input, and feedback.

Measurable Goal: Advertise any proposed MS4 Stormwater Management Ordinance, provide opportunities for public comment, evaluate any public input and feedback, and document the comments received and the municipality's response.

BMP #3: Regularly solicit public involvement and participation from the target audience groups. This should include an effort to solicit public reporting of suspected illicit discharges. Assist the public in their efforts to help implement your SWMP. Conduct public meetings to discuss the on-going implementation of your SWMP.

Measurable Goals: Conduct at least one public meeting per year to solicit public involvement and participation from target audience groups. The public should be given reasonable notice through the usual outlets a reasonable period in advance of each meeting. During the meetings, you should present a summary of your progress, activities, and accomplishments with implementation of your SWMP, and you should provide opportunities for the public to provide feedback and input. Your presentation can be made at specific MS4 meetings or during any other public meeting. Under this MCM, you should document and report instances of cooperation and participation in your activities; presentations you made to local watershed organizations and conservation organizations; and similar instances of participation or coordination with organizations in your community. You also should document and report activities in which members of the public assisted or participated in your meetings and in the implementation of your SWMP, including education activities or organized implementation efforts such as cleanups, monitoring, storm drain stenciling, or others.

MCM #3: Illicit Discharge Detection and Elimination (IDD&E)

The following are the requirements for MCM #3 that are included in the Federal Regulations:

- *Develop, implement, and enforce a program to detect and eliminate illicit discharges into the MS4 (40 CFR Part 122.34(b)(3)(i)).*
- *Develop, if not already completed, a storm sewer system map, showing the location of all outfalls and the names and locations of all surface waters of the Commonwealth that receive discharges from those outfalls (40 CFR Part 122.34(b)(3)(ii)(A)).*
- *To the extent allowable under State or local law, effectively prohibit, through ordinance, or other regulatory mechanism, non-stormwater discharges into your storm sewer system and implement appropriate enforcement procedures and actions (40 CFR Part 122.34(b)(3)(ii)(B)).*
- *Develop and implement a plan to detect and address non-stormwater discharges, including illegal dumping, to your system (40 CFR Part 122.34(b)(3)(ii)(C)).*
- *Inform public employees, businesses, and the general public of hazards associated with illegal discharges and improper disposal of waste (40 CFR Part 122.34(b)(3)(ii)(D)).*

The following requirements, Best Management Practices (BMPs) and Measurable Goals are to be implemented and achieved:

BMP #1: You shall develop and implement a written program for the detection, elimination, and prevention of illicit discharges into your regulated MS4s. Your program shall include dry weather field screening of outfalls for non-stormwater flows, and sampling of dry weather discharges for selected chemical and biological parameters. Test results shall be used as indicators of possible discharge sources. The program shall include the following:

- Procedures for identifying priority areas. These are areas with a higher likelihood of illicit discharges, illicit connections or illegal dumping. Priority areas may include areas with older infrastructure, a concentration of high-risk activities, or past history of water pollution problems.
- Procedures for screening outfalls in priority areas during varying seasonal and meteorological conditions.
- Procedures for identifying the source of an illicit discharge when a contaminated flow is detected at a regulated small MS4 outfall.
- Procedures for eliminating an illicit discharge.
- Procedures for assessing the potential for illicit discharges caused by the interaction of sewage disposal systems (e.g., on-lot septic systems, sanitary piping) with storm drain systems.
- Mechanisms for gaining access to private property to inspect outfalls (e.g., land easements, consent agreements, search warrants).
- Procedures for program documentation, evaluation and assessment.

Measurable Goal: For new permittees, the IDD&E program shall be developed during the first year of coverage under this General Permit and shall be implemented and evaluated each year thereafter. For renewal permittees, the existing IDD&E program shall continue to be implemented and evaluated annually. Records shall be kept of all outfall inspections, flows observed, results of field screening and testing, and other follow-up investigation and corrective action work performed under this program.

Recommendation: For information on development and implementation of an IDD&E program, refer to: *Illicit Discharge Detection and Elimination: A Guidance Manual for Program Development and Technical Assessments* (CWP, October 2004). <http://cfpub.epa.gov/NPDES/stormwater/idde.cfm>

BMP #2: Develop and maintain a map of your regulated small MS4. The map must also show the location of all outfalls and the locations and names of all surface waters of the Commonwealth (e.g., creek, stream, pond, lake, basin, swale, channel) that receive discharges from those outfalls.

Measurable Goals: For new permittees, develop the map(s) of your regulated small municipal separate storm sewer systems and the information on all outfalls from your regulated small MS4 by the end of the fourth (4th) year of permit

coverage. For renewal permittees, the existing map(s) of your regulated small MS4 shall be updated and maintained as necessary during each year of coverage under the permit.

BMP #3: In conjunction with the map(s) created under BMP #2 (either on the same map or on a different map), new permittees shall show, and renewal permittees shall update, the entire storm sewer collection system, including roads, inlets, piping, swales, catch basins, channels, basins, and any other features of the permittee's storm sewer system including municipal boundaries and/or watershed boundaries.

Measurable Goals: For new permittees, develop the map(s) by the end of the fourth (4th) year of coverage under the permit and update and maintain the map(s) as necessary each year of permit coverage thereafter. For renewal permittees, update and maintain the map(s) as necessary during each year of permit coverage.

BMP #4: Following the IDD&E program created pursuant to BMP #1, the permittee shall conduct outfall field screening, identify the source of any illicit discharges, and remove or correct any illicit discharges using procedures developed under BMP #1.

Measurable Goals: For new permittees, all of the identified regulated small MS4 outfalls shall be screened during Dry Weather on at least two different occasions during the permit coverage term. In each permit coverage year, at least forty percent of the total number of outfalls should be screened.

For renewal permittees, each of the identified regulated small MS4 outfalls shall be screened at least once during each permit coverage term. For areas where past problems have been reported or known sources of dry weather flows occur on a continual basis, outfalls shall be screened annually.

For each outfall, if the screening reveals dry weather flow, the discharge from the outfall and the area around the outfall shall be inspected visually for color, turbidity, sheen, floating or submerged solids; for adverse effects on plants or animals in proximity to the outfall; and for odor. If the outfall produces any odor, or if the visual inspection shows any indication that the discharge may contain pollutants, then samples of the discharge shall be collected for field and / or lab testing of selected chemical and biological parameters as part of a process to determine if the dry weather flow is illicit. Common parameters include pH, conductivity, E. Coli bacteria, fecal coliform bacteria, metals, suspended solids, dissolved solids, oils, ammonia, surfactants; chlorine; and fluoride.

You shall implement the IDD&E plan that you developed to address any non-storm water discharges. If an outfall does not have any dry weather flow, then sampling and testing are not needed.

For all permittees, outfall inspections need to be prioritized according to the perceived chance of illicit discharges within the outfall's contributing drainage area. Observations of each outfall shall be recorded each time an outfall is screened, regardless of the presence of dry weather flow. Proper quality assurance and quality control procedures shall be followed when collecting, transporting or analyzing water samples. All outfall inspection information shall be recorded on the Outfall Reconnaissance Inventory/Sample Collection field sheet (attached below) excerpted from the *Illicit Discharge Detection and Elimination: A Guidance Manual for Program Development and Technical Assessments* (CWP, October 2004). Adequate written documentation shall be maintained to justify a determination that an outfall flow is not illicit. If an outfall flow is illicit, the actions taken to identify and eliminate the illicit flow also shall be documented.

The results of outfall inspections and actions taken to remove or correct illicit discharges shall be summarized in periodic reports.

Recommendation: All permittees should consider conducting some outfall screenings during varying seasonal and meteorological conditions since it is possible for illicit discharges/connections to occur during different times of the year and during or just after rain events. Seasonal outfall screenings conducted during periods of both low and high groundwater conditions can be beneficial in identifying illicit discharges that can occur during these times.

BMP #5: Enact a stormwater management ordinance to implement and enforce a stormwater management program that includes prohibition of non-stormwater discharges to the regulated small MS4.

Measurable Goal: Within the first year of coverage under the permit, new permittees shall enact and implement an ordinance from an Act 167 Plan approved by the Department in 2005 or later, the MS4 Stormwater Management

Ordinance; or an ordinance that satisfies all applicable requirements in a completed and signed MS4 Stormwater Management Ordinance Checklist.

Renewal permittees must continue to maintain, update, implement, and enforce a Stormwater Management Ordinance that satisfies all applicable requirements.

Measurable Goal: New permittees shall submit a letter signed by a municipal official, municipal engineer, or the municipal solicitor as an attachment to their first year report certifying the enactment of an ordinance that meets all applicable requirements of this permit. Renewal permittees shall update their existing ordinance, if necessary, and submit documentation of completion to the Department.

BMP #6: Provide educational outreach to public employees, business owners and employees, property owners, the general public and elected officials (i.e., target audiences) about the program to detect and eliminate illicit discharges.

Educational outreach should include:

- Distribution of brochures and guidance for target audiences including schools;
- Programs to encourage and facilitate public reporting of illicit discharges;
- Organizing volunteers to locate and visually inspect outfalls and to stencil storm drains; and
- Implement and encourage recycling programs for common wastes such as motor oil, antifreeze and pesticides.

Measurable Goals: During each year of permit coverage, appropriate educational information concerning illicit discharges shall be distributed to the target audiences using methods outlined under MCM #1. If not already established, set up and promote a stormwater pollution reporting mechanism (e.g., a complaint line with message recording) by the end of the first year of permit coverage for the public to use to notify you of illicit discharges, illegal dumping or outfall pollution. Respond to all complaints in a timely and appropriate manner. Document all responses, include the action taken, the time required to take the action, whether the complaint was resolved successfully.

MCM #4: Construction Site Stormwater Runoff Control

If you checked Option MCM #4.A in Section E(4)-(5) of the NOI, then you are relying on DEP's statewide QLP for issuing NPDES Permits for Stormwater Discharges Associated with Construction Activities to satisfy all requirements under this MCM #4 and under BMPs #1 through #3 of MCM #5; therefore, all requirements are met for both this MCM #4 and BMPs #1 through #3 of MCM #5.

If you checked Option MCM #4.B in Section E(4)-(5) of the NOI, you are not relying on DEP's QLP for issuing NPDES Permits for Stormwater Discharges Associated with Construction Activities to satisfy this MCM #4 and BMPs #1 through #3 of MCM #5; therefore, you must implement and achieve all of the requirements in this MCM #4 and all of the requirements in MCM #5, including the Best Management Practices (BMPs) and the Measurable Goals.

The following are the requirements for MCM #4 that are included in the Federal Regulations:

- *Develop, implement, and enforce a program to reduce pollutants in any stormwater runoff to your small MS4 from construction activities that result in a land disturbance of greater than or equal to one acre, including projects less than one acre that are part of a larger common plan of development or sale that equals one acre or more (40 CFR Part 122.34(b)(4)(i)).*
- *Develop and implement an ordinance or other regulatory mechanism to require erosion and sediment controls, as well as sanctions to ensure compliance, to the extent allowable under State or local law (40 CFR Part 122.34(b)(4)(ii)(A)).*
- *Require construction site operators to implement appropriate erosion and sediment control best management practices (BMPs) (40 CFR Part 122.34(b)(4)(ii)(B)).*
- *Develop and implement requirements for construction site operators to control waste at the construction site that may cause adverse impacts to water quality. These wastes can include discarded building materials, concrete truck washout, chemicals, litter, and sanitary waste (40 CFR Part 122.34(b)(4)(ii)(C)).*
- *Develop and implement procedures for site plan review which incorporate consideration of potential water quality impacts (40 CFR Part 122.34(b)(4)(ii)(D)).*
- *Develop and implement procedures for receipt and consideration of information submitted by the public (40 CFR Part 122.34(b)(4)(ii)(E)).*
- *Develop and implement procedures for site inspections and enforcement of control measures (40 CFR Part 122.34(b)(4)(ii)(F)).*

Under 25 Pa. Code, Chapter 102 of Department regulations issued under the authority of the Pennsylvania Clean Streams Law, the permittee (a municipality or a county) may not issue a building or other permit or final approval to those proposing or conducting earth disturbance activities requiring a DEP permit until the DEP has issued an individual NPDES Permit, or DEP or a delegated county conservation district (CCD) has approved coverage under the general NPDES Permit for Stormwater Discharges Associated With Construction Activities.

BMP #1: Develop your program consisting of all procedures necessary to comply with the requirements of this MCM. Your program shall provide for construction stormwater permitting, construction inspection, and enforcement of installation and maintenance of the necessary E&S control measures. Your program shall describe clearly how your program will be coordinated with DEP's NPDES Construction Stormwater Permitting program.

Measurable Goals: For new permittees, the written program for this MCM shall be developed during the first year of permit coverage; nevertheless, you are responsible for implementation of this MCM during entire term of this permit, including the time you are developing your program.

For all permittees, your program shall be reviewed and updated during each year of permit coverage. The purpose of the written program is to establish clear roles and responsibilities for the implementation of the MCM #4 requirements. An agreement between the permittee, the CCD, and any other resources to be used by the permittee that clearly defines roles for each entity is recommended. If an agreement is made, you shall place and keep a written copy in your file, consistent with the Retention of Records requirements in this Permit. Please note that in

accordance with Section A.2.h in Part A of the Authorization to Discharge, as the permittee you are responsible to ensure that implementation of all requirements under this Permit are fulfilled.

Recommendation: Develop a tracking system that summarizes your actions to comply with this BMP (e.g., number of active construction sites, inspections, enforcement actions, etc.) and which can be described in a summary report format.

BMP #2: The permittee shall enact, implement, and enforce an ordinance to require the implementation of erosion and sediment control BMPs, as well as sanctions to ensure compliance. (If Box 4A is checked, this is not required of those MS4s?)

Measurable Goal: Within the first year of coverage under the permit, new permittees shall enact and implement an ordinance that meets all applicable requirements of this permit.

Measurable Goal: Permittees shall submit a letter signed by a municipal official, municipal engineer or the municipal solicitor as an attachment to their first periodic report certifying the enactment and implementation of a stormwater management ordinance that meets all requirements of this permit.

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. While sediment is the most common pollutant of concern for MCM #4, there are other types of pollutants that also can be a concern and the intent of this BMP is to address these other types of pollutants, such as, but not limited to, discarded building materials, washout from concrete trucks, chemicals, litter, and sanitary waste.

Measurable Goal: New permittees shall establish requirements to address this BMP by the end of the first year of permit coverage. Renewal permittees shall continue to implement existing requirements and update as necessary. This could be implemented by written municipal ordinance/code provisions, by standard notes on the site plans, by any other written format that accomplishes the objectives of this BMP, or by any combination of these measures. The goal of this BMP shall be communicated to construction site operators during pre-construction meetings. This BMP shall be implemented during each year of the MS4 permit. Permittees must prepare and maintain records of site inspections, including dates and results and you must maintain these records in accordance with the Retention of Records requirements in this Permit.

Recommendation: Verification of proper waste handling procedures can be determined at the same time that site E&S control inspections are conducted under BMP #1, described above.

BMP #4: Develop and implement procedures for the receipt and consideration of public inquiries, concerns, and information submitted by the public (to the permittee) regarding local construction activities. The permittee shall demonstrate acknowledgement and consideration of the information submitted, whether submitted verbally or in writing.

Measurable Goal: Permittees shall establish and implement a tracking system to keep a record of any submitted public information as well as your response, actions, and results. This BMP shall be implemented during each year of coverage under this General Permit and information should be submitted with the each periodic report.

Recommendation: Develop a tracking system that can keep a record of information submitted by the public as well as your responses to such public inquiries. The tracking system should be capable of producing periodic summary reports.

MCM #5: Post-Construction Stormwater Management (PCSM) in New and Re-Development Activities

If you checked Option MCM #4.A in Section E(4)-(5) of the NOI, then you are relying on DEP's statewide QLP for issuing NPDES Permits for Stormwater Discharges Associated with Construction Activities to satisfy all requirements under BMPs #1 through #3 of this MCM #5; therefore, all requirements are met for BMPs #1 through #3 of this MCM #5 and for all requirements under MCM #4.

If you checked Option MCM #4.B in Section E(4)-(5) of the NOI, you are not relying on DEP's QLP for issuing NPDES Permits for Stormwater Discharges Associated with Construction Activities to satisfy the requirements in BMPs #1 through #3 of this MCM #5; therefore, you must implement and achieve all of the requirements in this MCM #5 and all of the requirements in MCM #4, including the Best Management Practices (BMPs) and the Measurable Goals.

The following are the requirements for MCM #5 that are included in the Federal Regulations:

- *Develop, implement, and enforce a program to address stormwater runoff from new development and redevelopment projects that disturb greater than or equal to one acre, including projects less than one acre that are part of a larger common plan of development or sale, that discharge into your small MS4. Your program shall ensure that controls are in place that would prevent or minimize water quality impacts (40 CFR Part 122.34(b)(5)(i)).*
- *Develop and implement strategies which include a combination of structural and/or non-structural best management practices (BMPs) appropriate for your community (40 CFR Part 122.34(b)(5)(ii)(A)).*
- *Use an ordinance or other regulatory mechanism to address post-construction runoff from new development and redevelopment projects to the extent allowable under State, Tribal or local law (40 CFR Part 122.34(b)(5)(ii)(B)).*
- *Ensure adequate long-term operation and maintenance of BMPs (40 CFR Part 122.34(b)(5)(ii)(C)).*

The following requirements, Best Management Practices (BMPs) and Measurable Goals are to be implemented and achieved:

Note: Please refer to the definitions section of this PAG-13 permit for clarification of terms used in this MCM. In the following language, the term "**BMPs**" refers to **post-construction stormwater management controls and best management practices**.

BMP #1: Develop a written procedure that describes how the permittee shall address all required components of this MCM. Guidance can be found in the Pennsylvania Stormwater Best Management Practices Manual. This plan shall include the following components:

- 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;

Measurable Goal: The written procedure shall be developed by the end of the first year of permit coverage and be reviewed and updated every permit year thereafter, as needed. The intent of BMP #1 is for the permittee to describe how the listed tasks will be accomplished.

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. This requirement can be met by ensuring that the selected BMPs comply with the municipal Stormwater Management Ordinance that meets the requirements of this General Permit.

Measurable Goal: All qualifying development or redevelopment projects shall be reviewed to ensure that their post-construction stormwater management plans and selected BMPs conform to the applicable requirements. A tracking

system (e.g., database, spreadsheet, or written list) shall be maintained to record qualifying projects and their associated BMPs. In your records, you shall note if there are no qualifying projects in a calendar year.

BMP #3: Ensure that controls are installed that shall prevent or minimize water quality impacts.

Measurable Goal: All qualifying development or redevelopment projects shall be inspected during the construction phase to ensure proper installation of the approved structural PCSM BMPs. A tracking system (e.g., database, spreadsheet, or written list) shall be implemented to track the inspections conducted and to track the results of the inspections (e.g., BMPs were, or were not, installed properly). Permittees not relying on DEP's statewide QLP to satisfy requirements under this BMP shall summarize construction inspections and results in periodic reports. See BMP #6 for requirements related to post-construction inspection and tracking of PCSM BMPs to ensure that the operation and maintenance plan is being implemented.

BMP #4: The permittee shall 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 or local law.

Measurable Goal: Within the first year of coverage under this permit, new permittees shall enact and implement a stormwater management ordinance that meets the requirements of this General Permit.

Measurable Goal: All permittees shall submit a letter signed by a municipal official, municipal engineer or the municipal solicitor as an attachment to their first periodic report certifying the enactment of a stormwater management ordinance that meets the requirements of this General Permit.

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.

Measurable Goal: In your inventory of development and redevelopment projects authorized for construction since March 10, 2003, that discharge stormwater to your regulated MS4s, indicate which projects incorporated LID practices and for each project list and track the BMPs that were used.

Measurable Goal: Enact ordinances consistent with LID practices and repeal sections of ordinances that conflict with LID practices. Progress with enacting and updating your ordinances to enable the use of LID practices shall be summarized in the periodic reports.

Recommendations: The U.S. EPA website provides publications on LID, including Reducing Stormwater Costs through Low Impact Development (LID) Strategies and Practices Publication Number EPA 841-F-07-006, December 2007 at <http://www.epa.gov/owow/nps/lid/costs07/>. The Pennsylvania Standards for Residential Site Development, Pennsylvania Housing Research/Resource Center, The Pennsylvania State University, April 2007 at <http://www.engr.psu.edu/phrc/>.

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).

Measurable Goal: Within the first year of coverage under this permit, new permittees shall develop and implement a written inspection program to ensure that stormwater BMPs are properly operated and maintained. The program shall include sanctions and penalties for non-compliance. All permittees shall review and update the inspection program annually and shall continue to implement this BMP.

Measurable Goal: An inventory of PCSM BMPs shall be developed by permittees and shall be continually updated during the term of coverage under the permit as development projects are reviewed, approved, and constructed. This inventory shall include all PCSM BMPs installed since March 10, 2003 that discharge directly or indirectly to your regulated small MS4s. The inventory also should include PCSM BMPs discharging to the regulated small MS4 system that may cause or contribute to violation of water quality standard. The inventory shall include:

- all PCSM BMPs that were installed to meet requirements in NPDES Permits for Stormwater Discharges Associated with Construction Activities approved since March 10, 2003.
- the exact location of the PCSM BMP (e.g., street address);

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- information (e.g., name, address, phone number(s)) for BMP owner and entity responsible for BMP Operation and Maintenance (O&M), if different from BMP owner;
- the type of BMP and the year it was installed;
- maintenance required for the BMP type according to the Pennsylvania Stormwater BMP Manual or other manuals and resources;
- the actual inspection/maintenance activities for each BMP;
- an assessment by the permittee if proper operation and maintenance occurred during the year and if not, what actions the permittee has taken, or shall take, to address compliance with O&M requirements

Recommendation: Develop a single system that supports recording and tracking the information specified in BMPs #3, #4 and #5.

MCM #6: Pollution Prevention/Good Housekeeping for Municipal Operations

The following are the requirements for MCM #6 that are included in the Federal Regulations:

- *Develop and implement an operation and maintenance program that includes a training component and has the ultimate goal of preventing or reducing pollutant runoff from municipal operations (40 CFR Part 122.34(b)(6)(i)).*
- *Provide employee training to prevent and reduce stormwater pollution from activities such as parks and open space maintenance, fleet and building maintenance, new construction and land disturbances, and stormwater system maintenance (40 CFR Part 122.34(b)(6)(i)).*

The following requirements, Best Management Practices (BMPs) and Measurable Goals are to be implemented and achieved:

BMP #1: Identify and document all facilities and activities that are owned or operated by the permittee and have the potential for generating stormwater runoff to the regulated small MS4. This includes activities conducted by contractors for the permittee. Activities may include the following: street sweeping; snow removal/deicing; inlet/outfall cleaning; lawn/grounds care; general storm sewer system inspections and maintenance/repairs; park and open space maintenance; municipal building maintenance; new construction and land disturbances; right-of-way maintenance; vehicle operation, fueling, washing and maintenance; and material transfer operations, including leaf/yard debris pickup and disposal procedures. Facilities can include streets; roads; highways; parking lots and other large paved surfaces; maintenance and storage yards; waste transfer stations; parks; fleet or maintenance shops; wastewater treatment plants; stormwater conveyances (open and closed pipe); riparian buffers; and stormwater storage or treatment units (e.g., basins, infiltration/filtering structures, constructed wetlands, etc.).

Measurable Goal: By the end of the first year of permit coverage, new permittees shall identify and document all types of municipal operations, facilities and activities and land uses that may contribute to stormwater runoff within areas of municipal operations that discharge to the regulated small MS4. Renewal permittees should have completed this list during the previous permit term. For all permittees, this information shall be reviewed and updated each year of permit coverage, as needed. Part of this effort shall include maintaining a basic inventory of various municipal operations and facilities.

BMP #2: Develop, implement and maintain a written operation and maintenance (O&M) program for all municipal operations and facilities that could contribute to the discharge of pollutants from the regulated small MS4s, as identified under BMP #1. This program (or programs) shall address municipally owned stormwater collection or conveyance systems, but could include other areas (as identified under BMP #1). The O&M program(s) should stress pollution prevention and good housekeeping measures, contain site-specific information, and address the following areas:

- Management practices, policies, procedures, etc. shall be developed and implemented to reduce or prevent the discharge of pollutants to your regulated small MS4s. You should consider eliminating maintenance-area discharges from floor drains and other drains if they have the potential to discharge to storm sewers.
- Maintenance activities, maintenance schedules, and inspection procedures to reduce the potential for pollutants to reach your regulated small MS4s. You also should review your procedures for maintaining your stormwater BMPs.
- Controls for reducing or eliminating the discharge of pollutants from streets, roads, highways, municipal parking lots, maintenance and storage yards, waste transfer stations, fleet or maintenance shops with outdoor storage areas, and salt / sand (anti-skid) storage locations and snow disposal areas.
- Procedures for the proper disposal of waste removed from your regulated small MS4s and your municipal operations, including dredge spoil, accumulated sediments, trash, household hazardous waste, used motor oil, and other debris.

Measurable Goal: During the first year of permit coverage, new permittees shall develop and implement a written O&M program that complies with BMPs #1 and #2. Renewal permittees shall continue to implement their existing program. All permittees shall review the O&M program annually, edit as necessary, and continue to implement during every year of permit coverage.

Guidance: Permittees may develop a single all encompassing written O&M program or they may develop separate programs for their stormwater system and for their vehicles.

BMP #3: Develop and implement an employee training program that addresses appropriate topics to further the goal of preventing or reducing the discharge of pollutants from municipal operations to your regulated small MS4s. The program may be developed and implemented using guidance and training materials that are available from federal, state or local agencies, or other organizations. Any municipal employee or contractor shall receive training. This could include public works staff, building / zoning / code enforcement staff, engineering staff (on-site and contracted), administrative staff, elected officials, police and fire responders, volunteers, and contracted personnel. Training topics should include operation, inspection, maintenance and repair activities associated with any of the municipal operations / facilities identified under BMP #1. Training should cover all relevant parts of the permittee's overall stormwater management program that could affect municipal operations, such as illicit discharge detection and elimination, construction sites, and ordinance requirements.

Measurable Goal: During the first year of permit coverage, new permittees shall develop and implement a training program that identifies the training topics that will be covered, and what training methods and materials will be used. Renewal permittees shall continue to operate under their existing program. All permittees shall review the training program annually, edit it as necessary, and continue to implement it during every year of permit coverage.

Measurable Goal: Your employee training shall occur at least annually (i.e., during each permit coverage year) and shall be fully documented in writing and reported in your periodic reports. Documentation shall include the date(s) of the training, the names of attendees, the topics covered, and the training presenter(s).

Guidance: The training requirements of this BMP can be met in various ways. Training can be:

- formal or informal;
- conducted on-site or off-site;
- conducted on-the-job or during dedicated training periods;
- conducted one-on-one or in a group setting (including with staff from other MS4s);
- conducted by municipal staff or consultants/volunteers;
- conducted via oral presentations/instructions and/or via written materials (e.g., SOP's, guidance manuals, tests).

Recommendation: For efficiency and cost savings, you may wish to arrange and schedule joint training events with other nearby operators of regulated small MS4s.

OUTFALL RECONNAISSANCE INVENTORY/ SAMPLE COLLECTION FIELD SHEET

Section 1: Background Data

Subwatershed:		Outfall ID:	
Today's date:		Time (Military):	
Investigators:		Form completed by:	
Temperature (°F):	Rainfall (in.): Last 24 hours:	Last 48 hours:	
Latitude:	Longitude:	GPS Unit:	GPS LMK #:
Camera:		Photo #s:	
Land Use in Drainage Area (Check all that apply):			
<input type="checkbox"/> Industrial		<input type="checkbox"/> Open Space	
<input type="checkbox"/> Ultra-Urban Residential		<input type="checkbox"/> Institutional	
<input type="checkbox"/> Suburban Residential		Other: _____	
<input type="checkbox"/> Commercial		Known Industries: _____	
Notes (e.g., origin of outfall, if known):			

Section 2: Outfall Description

LOCATION	MATERIAL	SHAPE	DIMENSIONS (IN.)	SUBMERGED
<input type="checkbox"/> Closed Pipe	<input type="checkbox"/> RCP <input type="checkbox"/> CMP <input type="checkbox"/> PVC <input type="checkbox"/> HDPE <input type="checkbox"/> Steel <input type="checkbox"/> Other: _____	<input type="checkbox"/> Circular <input type="checkbox"/> Elliptical <input type="checkbox"/> Box <input type="checkbox"/> Other: _____	<input type="checkbox"/> Single <input type="checkbox"/> Double <input type="checkbox"/> Triple <input type="checkbox"/> Other: _____	Diameter/Dimensions: _____ In Water: <input type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully With Sediment: <input type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully
<input type="checkbox"/> Open drainage	<input type="checkbox"/> Concrete <input type="checkbox"/> Earthen <input type="checkbox"/> rip-rap <input type="checkbox"/> Other: _____	<input type="checkbox"/> Trapezoid <input type="checkbox"/> Parabolic <input type="checkbox"/> Other: _____	Depth: _____ Top Width: _____ Bottom Width: _____	
<input type="checkbox"/> In-Stream	(applicable when collecting samples)			
Flow Present?	<input type="checkbox"/> Yes <input type="checkbox"/> No <i>If No, Skip to Section 5</i>			
Flow Description (If present)	<input type="checkbox"/> Trickle <input type="checkbox"/> Moderate <input type="checkbox"/> Substantial			

Section 3: Quantitative Characterization

FIELD DATA FOR FLOWING OUTFALLS				
	PARAMETER	RESULT	UNIT	EQUIPMENT
<input type="checkbox"/> Flow #1	Volume		Liter	Bottle
	Time to fill		Sec	
<input type="checkbox"/> Flow #2	Flow depth		In	Tape measure
	Flow width	____' ____"	Ft, In	Tape measure
	Measured length	____' ____"	Ft, In	Tape measure
	Time of travel		S	Stop watch
	Temperature		°F	Thermometer
	pH		pH Units	Test strip/Probe
	Ammonia		mg/L	Test strip

Outfall Reconnaissance Inventory Field Sheet

Section 4: Physical Indicators for Flowing Outfalls Only

Are Any Physical Indicators Present in the flow? Yes No *(If No, Skip to Section 5)*

INDICATOR	CHECK IF Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
			1 - Faint	2 - Easily detected	3 - Noticeable from a distance
Odor	<input type="checkbox"/>	<input type="checkbox"/> Sewage <input type="checkbox"/> Rancid/sour <input type="checkbox"/> Petroleum/gas <input type="checkbox"/> Sulfide <input type="checkbox"/> Other:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Color	<input type="checkbox"/>	<input type="checkbox"/> Clear <input type="checkbox"/> Brown <input type="checkbox"/> Gray <input type="checkbox"/> Yellow <input type="checkbox"/> Green <input type="checkbox"/> Orange <input type="checkbox"/> Red <input type="checkbox"/> Other:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Turbidity	<input type="checkbox"/>	See severity	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Floatables -Does Not Include Trash!!	<input type="checkbox"/>	<input type="checkbox"/> Sewage (Toilet Paper, etc.) <input type="checkbox"/> Suds <input type="checkbox"/> Petroleum (oil sheen) <input type="checkbox"/> Other:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? Yes No *(If No, Skip to Section 6)*

INDICATOR	CHECK IF Present	DESCRIPTION	COMMENTS
Outfall Damage	<input type="checkbox"/>	<input type="checkbox"/> Spalling, Cracking or Chipping <input type="checkbox"/> Peeling Paint <input type="checkbox"/> Corrosion	
Deposits/Stains	<input type="checkbox"/>	<input type="checkbox"/> Oily <input type="checkbox"/> Flow Line <input type="checkbox"/> Paint <input type="checkbox"/> Other:	
Abnormal Vegetation	<input type="checkbox"/>	<input type="checkbox"/> Excessive <input type="checkbox"/> Inhibited	
Poor pool quality	<input type="checkbox"/>	<input type="checkbox"/> Odors <input type="checkbox"/> Colors <input type="checkbox"/> Floatables <input type="checkbox"/> Oil Sheen <input type="checkbox"/> Suds <input type="checkbox"/> Excessive Algae <input type="checkbox"/> Other:	
Pipe benthic growth	<input type="checkbox"/>	<input type="checkbox"/> Brown <input type="checkbox"/> Orange <input type="checkbox"/> Green <input type="checkbox"/> Other:	

Section 6: Overall Outfall Characterization

Unlikely Potential (presence of two or more indicators) Suspect (one or more indicators with a severity of 3) Obvious

Section 7: Data Collection

1. Sample for the lab? Yes No

2. If yes, collected from: Flow Pool

3. Intermittent flow trap set? Yes No If Yes, type: OBM Caulk dam

Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?



INSTRUCTIONS REQUEST FOR WAIVER

For a waiver under the NPDES MS4 General Permit (PAG-13), you must meet the eligibility requirements summarized below and complete the application in as much detail as possible and return it to the appropriate regional office.

I. GENERAL INSTRUCTIONS

Who is eligible to use the Request for Waiver (RFW) Forms?

Owners or operators of regulated small MS4s that meet the criteria in either subsection 1 or subsection 2 below. See Federal Regulations 40 CFR § 123.32.

The waiver is effective only upon written approval by DEP.

The two options to establish eligibility for operators of regulated small MS4s to apply for a waiver are:

1. Small MS4s in municipalities with a population less than 1,000 within the urbanized portion of the municipality where the following two conditions are met:
 - a. The small MS4s' discharges are not contributing substantially to the pollutant loadings of a physically interconnected regulated MS4; and
 - b. If the regulated small MS4 discharges any pollutant(s) that have been identified as a cause of impairment of any water body to which the MS4 discharges, stormwater controls are not needed based on wasteload allocations that are part of an EPA approved or established "Total Maximum Daily Load" (TMDL) that addresses the pollutant(s) of concern. 40 CFR § 122.32 (d).

NOTE: Option 1 waiver requests do not require DEP to conduct an assessment of the receiving waterbody(ies); nor do they require that assessments already have been completed.

2. Small MS4s in municipalities with populations less than 10,000 in which all of the following criteria are satisfied:
 - a. The Department of Environmental Protection (DEP) has conducted an evaluation of all surface waters that receive a discharge from the small MS4 eligible for such a waiver request;
 - b. The DEP evaluation(s) shows that stormwater controls are not needed, based on wasteload allocations that are part of an EPA approved or established TMDL that addresses the pollutant(s) of concern or, if a TMDL has not been developed or approved, an equivalent analysis that determines sources and allocations for the pollutant(s) of concern;
 - c. For the purpose of paragraph (2)(b), the pollutant(s) of concern include biochemical oxygen demand (BOD), sediment, or a parameter that addresses sediment (such as total suspended solids, turbidity or siltation), pathogens, oil and grease, and any pollutant that has been identified as a cause of impairment of any water body that will receive a discharge from the small MS4;
 - d. DEP has determined that future discharges from the regulated small MS4 do not have the potential to result in exceedances of water quality standards, including impairment of designated uses, or other significant water quality impacts, including habitat and biological impacts; and
 - e. The regulated small MS4 does not discharge stormwater to a water body classified as "Special Protection" (e.g., Exceptional Value, High Quality)

NOTE: Option 2 waiver requests do require that evaluations have been completed previously for every waterbody receiving discharges from the regulated small MS4s in the municipality.

If a waiver is granted by DEP, it will be contingent upon the operator of the waived regulated small MS4s cooperating with operators of physically inter-connected upstream and downstream regulated small MS4s, if any.

When to File *the Request for Waiver*

Operators of regulated small MS4s who meet the eligibility requirements and seek to be waived from coverage under the NPDES MS4 permit requirement must file a Request for Waiver and it must be received by DEP along with the NOI application before the due date for a permit application. The request for waiver does not affect the legal requirement to submit a Notice of Intent (NOI) for coverage under the NPDES MS4 General Permit (PAG-13).

Where to File the Request For Waiver

Completed forms are to be submitted to the appropriate regional office of DEP.

II. REQUEST FOR WAIVER FORM

Section A: MS4 Operator Information

Name of Operator of the regulated small MS4s: Provide the legal name of the governmental entity or other legal entity that controls the operation of the regulated small MS4s described in this application. Include the telephone number and mailing address.

Section B: Contact Person

Provide the name of a primary point of contact for the person responsible for receiving and responding to all correspondence from DEP regarding General Permit PAG-13 and the stormwater discharges from the regulated small MS4s. Include the telephone number and mailing address.

Section C: Municipality

Municipality: Provide the name of the municipality in which the regulated small MS4 is located.

Watershed(s): Provide the name of the watershed or watersheds into which the regulated small MS4s discharges stormwater.

Map: USGS Topographical Map identifying the approximate locations of discharges to surface waters along with the names of the receiving surface waters.

County: Name of the County in which the regulated small MS4s are located.

Provide the 1990 and 2000 Bureau of Census populations.

Urbanized Area Name and Number: Provide the name of the Urbanized Area in which the regulated small MS4 is located. A list of Urbanized Areas and names of municipalities operating regulated small MS4s in each Urbanized Area is available at www.dep.state.pa.us, keyword: Stormwater.

Section D: Compliance

If you have any permit(s) issued by DEP, but you **have not been** in compliance, describe how you resolved the violation(s).

Section E: Waiver Eligibility Criteria

There are two sets of Federal criteria under which you may be eligible for a waiver. It is important that you answer these questions accurately because they will help DEP evaluate your Request for Waiver. This section also helps you determine whether the Request for Waiver should be submitted to DEP and provides relevant information to the department.

1. For Municipalities that have Populations less than 1,000 within their Urbanized Areas:

- a. The municipality has fewer than 1,000 people within the urbanized portion of the municipality. This would be the population served by the regulated municipal separate storm sewer system only (not any population served by combined sewer system components).
- b. *Has it been determined that your system does not contribute significantly to the pollutant loadings of the waters of the Commonwealth or another physically interconnected downstream regulated MS4? Go to this website where there is a listing of all currently impaired water bodies in the Commonwealth.*
<http://www.depweb.state.pa.us/watersupply/cwp/view.asp?a=1261&q=535678>.

- c. (i) *Pollutants of concern.* Review the information in the list described in “b” above to see if the “pollutants of concern” for any impaired water bodies receiving discharges from your regulated small MS4s could be affected by stormwater. If so, then your regulated small MS4s may not be eligible for a waiver.
- (ii) *Wasteload Allocation.* DEP is preparing Total Maximum Daily Loads (TMDLs) which include wasteload allocations, for all impaired water bodies. The schedule and other information related to preparation of TMDLs can be found at: http://www.dep.state.pa.us/watermanagement_apps/tmdl/. If any of the receiving waterbodies for your regulated small MS4s are impaired and no wasteload allocation is established, you are not eligible for a waiver.
- (iii) If a wasteload allocation is established and if DEP has determined that stormwater controls are not needed for your regulated small MS4s, then you may be eligible for a waiver.

NOTE: TMDLs are water quality assessments that determine the source or sources of pollutants of concern for a particular water body, consider the maximum amount of pollutants the water body can assimilate and then allocate to each source a set level of pollutants that the source is allowed to discharge (i.e., a “wasteload allocation”).

2. Municipalities with fewer than 10,000 people:

- a. The jurisdiction has fewer than 10,000 people.
- b. *DEP evaluation of all receiving surface waters.* This information can be obtained from the local DEP regional office. See the discussion above about pollutants of concern and wasteload allocations. Pollutant(s) of concern include biochemical oxygen demand (BOD), sediment, or a parameter that addresses sediment (such as total suspended solids, turbidity or siltation), pathogens, oil and grease, and any pollutant that has been identified as a cause of impairment of any water body that will receive a discharge from your regulated small MS4s;
- c. *Stormwater controls are not needed.* Sources for this information are TMDLs.
- d. *“Special protection” waters.* To answer this question, refer to Chapter 93 of the DEP’s Rules and Regulations available at www.pacode.com, or contact the appropriate regional office.

Designated Uses: <http://www.pacode.com/secure/data/025/chapter93/chap93toc.html>

Existing Uses: <http://www.depweb.state.pa.us/watersupply/cwp/view.asp?a=1261&q=449172>

NOTE: This second set of waiver criteria differs from the option in E.1 above in two ways:

- *It requires DEP’s determination that the discharges are not affecting the receiving water body, regardless of whether the water body is impaired or not (it does not impose a duty on DEP to issue the determination).*
- *An assessment of the impacts of future changes must be performed (no such assessment is required under E.1).*

Section F: Certification

Certification: The information contained in the Request for Waiver must be certified to be true and to the best of the applicant’s knowledge, accurate. The Request for Waiver must be signed as follows:

- a. For a Corporation -- A responsible corporate officer.
- (1) A president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation; or
- (2) The manager of one or more manufacturing, production or operating facilities employing more than 250 persons or having gross annual sales or expenditures exceeding \$25,000,000 (in second quarter 1980 dollars) if authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures;
- (a) For a partnership or sole proprietorship -- By a general partner or the proprietor, respectively; or

- b. For a municipality -- State, Federal or other public agency by either a principal executive officer or ranking elected official. For purposes of this section, a principal executive officer of a Federal agency includes:
 - (1) The chief executive officer of the agency, or
 - (2) A senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., Regional Administrator of the EPA).



COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF POINT AND NON-POINT SOURCE MANAGEMENT

OFFICIAL USE ONLY
PA _____

REQUEST FOR WAIVER
Of NPDES Permit Requirement
Small Municipal Separate Storm Sewer Systems (MS4s)

This form is for use by Municipalities with population less than 10,000. The form requests information related to the strict waiver criteria in the federal regulations at 40 CFR §123.35(d)

A. Name of MS4 operator: _____	B. CONTACT PERSON: _____
TELEPHONE NO.: _____	TELEPHONE NO.: _____
MAILING ADDRESS: _____	MAILING ADDRESS: _____
C. MUNICIPALITY: _____ WATERSHED(S): _____ _____ COUNTY: _____	Population (1990) : _____ Population (2000): _____ Urbanized Area Name: _____ Urbanized Area No.: _____
<p>D. Is/was applicant in violation of any of DEP's permits issued by DEP, or any orders, regulations or schedules of compliance in the last five (5) years? Yes <input type="checkbox"/> No <input type="checkbox"/></p> <p>If yes, list each permit, order, regulation or schedule that is/was in violation and provide compliance status of the permitted activity (use additional sheets to provide information on all permits).</p> <p>Brief Description of Non-Compliance:</p> <p>Steps Taken to Return to Compliance and Dates Compliance Achieved:</p>	
<p>E. INFORMATION ON WAIVER ELLIGIBILITY CRITERA Use this section to help DEP evaluate your Request based on the EPA criteria. There are two sets of criteria:</p>	
<p>1. <u>For municipalities with a population less than 1,000 in their urbanized areas:</u></p> <p>(a) Does your municipality have fewer than 1,000 people in the urbanized area? Yes <input type="checkbox"/> No <input type="checkbox"/></p> <p>(b) Has it been determined that the regulated small MS4s do not contribute substantially to the pollution loadings of another physically-interconnected downstream MS4? Yes <input type="checkbox"/> No <input type="checkbox"/></p> <p>Explain:</p>	

(c) Has the receiving waterbody(ies) been determined to be "impaired" under DEP's surface water assessment program?	Yes <input type="checkbox"/>	No <input type="checkbox"/>
If the answer to "c" is "YES," then answer these questions:		
(i) What were the "pollutants of concern" that caused the impairment?		
(ii) Has a wasteload allocation been developed as part of an EPA-approved or established Total Maximum Daily Load (TMDL) for all of those pollutants of concern discharged from your MS4?	Yes <input type="checkbox"/>	No <input type="checkbox"/>
(iii) Does the wasteload allocation determine that no storm water controls are needed for your MS4 for those pollutants of concern?	Yes <input type="checkbox"/>	No <input type="checkbox"/>
2. For Municipalities with a population less than 10,000:		
(a) Does your municipality have a population less than 10,000 people?	Yes <input type="checkbox"/>	No <input type="checkbox"/>
(b) Has DEP evaluated all surface waterbodies that receive discharges from your regulated small MS4s?	Yes <input type="checkbox"/>	No <input type="checkbox"/>
If the answer to (b) is "YES," for all such waterbodies,		
(i) Is there a wasteload allocation that is part of an EPA-approved TMDL, or other equivalent analysis, for each one of those waterbodies?	Yes <input type="checkbox"/>	No <input type="checkbox"/>
(ii) What are the pollutants of concern in the wasteload allocation(s)?		
(iii) has DEP determined that stormwater controls are not needed in your regulated small MS4s, based on such wasteload allocation(s)?	Yes <input type="checkbox"/>	No <input type="checkbox"/>
(c) Has DEP determined that future stormwater discharges from your regulated small MS4 does not have the potential to result in exceedances of water quality standards, or other significant water quality impacts, including habitat and biological impacts?	Yes <input type="checkbox"/>	No <input type="checkbox"/>
(d) Does the regulated small MS4 discharge stormwater to waters, including wetlands, that are classified for "special protection"?	Yes <input type="checkbox"/>	No <input type="checkbox"/>

3. **For all applicants:**

- b) Enclose a copy of the NPDES MS4 General Permit NOI.

F. CERTIFICATION:

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I believe that the small MS4(s) above meet the federal small MS4 waiver requirements and that all supporting documents are attached herein. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

NAME AND OFFICIAL TITLE (Print or type Name): (Use corporate or professional seal as appropriate)

SIGNATURE:

DATE SIGNED:



**GENERAL PERMIT PAG-13
FOR STORMWATER DISCHARGES
FROM SMALL MUNICIPAL SEPARATE STORM SEWER SYSTEMS (MS4s)**

**MS4 STORMWATER OPERATION AND MAINTENANCE ORDINANCE
CHECKLIST AND
MS4 STORMWATER MANAGEMENT ORDINANCE CHECKLIST**

EXECUTIVE SUMMARY AND INSTRUCTIONS

Federal regulations require municipalities designated by federal regulations or DEP to obtain permits and to develop and implement a Stormwater Management Program (SWMP).

The SWMP requires permittees to adopt, implement, and enforce a stormwater management ordinance. If in the NOI, you checked box MCM #4.A, then you must follow the instructions in paragraph A below. If you checked box MCM #4.B, then you must follow the instructions in paragraph B below.

- A. If you will rely on DEP's statewide QLP for issuing NPDES Permits for Stormwater Discharges Associated with Construction Activities to satisfy all requirements under this MCM #4 and all requirements under BMPs #1 through #3 of MCM #5, then you must satisfy one of the following three statements:
1. Enact, implement, and enforce an ordinance from an Act 167 Plan approved by DEP in 2005 or later; or
 2. Enact the MS4 Stormwater Operation and Maintenance Ordinance; or
 3. Enact an ordinance that satisfies all applicable requirements in a completed and signed MS4 Operation and Maintenance Ordinance Checklist.
- B. If you will not be relying on DEP's statewide QLP for issuing NPDES Permits for Stormwater Discharges Associated with Construction Activities, then you must satisfy one of the following three statements:
1. Enact, implement, and enforce an ordinance from an Act 167 Plan approved by DEP in 2005 or later; or
 2. Enact the MS4 Stormwater Management Ordinance; or
 3. Enact an ordinance that satisfies all applicable requirements in a completed and signed MS4 Stormwater Management Ordinance Checklist.

Permittees must enact, implement, and enforce an ordinance that satisfies the above requirements. For new permittees, this requirement must be satisfied within 12 months of the date coverage commences as stated on the Approval of General Permit Coverage. The permittee must indicate how and when these requirements will be met in the Notice of Intent and report that implementation of the ordinance was completed in the first annual report or the first progress report.

Renewal permittees must continue to maintain, update, implement, and enforce an Ordinance that satisfies all applicable requirements.

Permittees choosing to use either the MS4 Stormwater Operation and Maintenance Ordinance Checklist or the MS4 Stormwater Management Ordinance Checklist must answer all of the questions and complete the signature block that follows the questions. For all questions that are answered "No," you must provide an explanation and justification to show that your ordinance provides equal or better protection of public health and safety and of water quality than the MS4 Ordinance that corresponds to your questionnaire.

MS4 OPERATION AND MAINTENANCE ORDINANCE CHECKLIST

	Yes	No	DEP Use																
<p>Outline</p> <p>The following list of sections represents content that must be present in an MS4 stormwater management operation and maintenance ordinance. The order may vary. Does your stormwater management ordinance contain all of these sections, or their equivalent?</p> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left; border-bottom: 1px solid black;"><u>Article</u></th> <th style="text-align: left; border-bottom: 1px solid black;"><u>Title</u></th> </tr> </thead> <tbody> <tr> <td>I</td> <td>General Provisions</td> </tr> <tr> <td>II</td> <td>Definitions</td> </tr> <tr> <td>III</td> <td>Stormwater Management Requirements</td> </tr> <tr> <td>IV</td> <td>Operation and Maintenance</td> </tr> <tr> <td>V</td> <td>Prohibitions</td> </tr> <tr> <td>VI</td> <td>Enforcement and Penalties</td> </tr> <tr> <td>VII</td> <td>References</td> </tr> </tbody> </table>	<u>Article</u>	<u>Title</u>	I	General Provisions	II	Definitions	III	Stormwater Management Requirements	IV	Operation and Maintenance	V	Prohibitions	VI	Enforcement and Penalties	VII	References	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<u>Article</u>	<u>Title</u>																		
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IV	Operation and Maintenance																		
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VI	Enforcement and Penalties																		
VII	References																		
<p>Article I, Section 102. Findings</p> <p>Does your ordinance contain a “findings” section that includes the following four items? Federal and state regulations require this municipality to obtain a permit for discharges from its MS4 and to implement a program of stormwater controls. Inadequate maintenance of stormwater best management practices (BMPs) causes loss of water quality, flooding, and other problems. A program of reasonable regulation of connections and discharges to municipal stormwater management facilities will be beneficial. Stormwater is an important resource.</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>																
<p>Article I, Section 103. Purpose</p> <p>Does your ordinance contain a “purpose” section that includes the following four items? Meet NPDES MS4 permit requirements. Meet state water quality requirements Reduce accelerated erosion, scour, aggradation, and degradation. Provide procedures and standards for proper operation and maintenance of stormwater management BMPs.</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>																
<p>Article I, Section 104. Authority</p> <p>Does your ordinance contain an “authority” section that includes the following items?</p> <ol style="list-style-type: none"> 1. Applicable municipal code. 2. Pennsylvania Municipalities Planning Code 	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>																
<p>Article I, Section 105. Applicability</p> <p>Does your stormwater management ordinance apply to all activities related to proper operation and maintenance of stormwater management facilities and BMPs and all activities that may contribute non-stormwater discharges to the municipality’s regulated small MS4?</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>																
<p>Article I, Section 106. Repealer</p> <p>Does your ordinance contain a “repealer” clause, or has your municipality taken other action, to repeal all provisions in all municipal ordinances and regulations that are inconsistent with your current MS4 stormwater management ordinance?</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>																

	Yes	No	DEP Use
<p>Article I, Section 107. Severability</p> <p>Does your ordinance contain a “severability” provision to ensure that all other sections of this ordinance survive in the event a court declares any specific sections invalid?</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<p>Article I, Section 108. Compatibility</p> <p>Does your ordinance contain a “compatibility” provision as a reminder that municipal approvals issued under this ordinance do not satisfy approval requirements under other laws.</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<p>Article I, Section 109. Erroneous Permit</p> <p>Any permit or authorization issued or approved based on false, misleading or erroneous information provided by an applicant is void without the necessity of any proceedings for revocation. Any work undertaken or use established pursuant to such permit or other authorization is unlawful. No action may be taken by a board, agency or employee of the Municipality purporting to validate such a violation.</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<p>Article II. Definitions</p> <p>Definitions of the following terms are necessary; however, the wording may vary to some extent from the wording shown below. Critical definitions include: Earth Disturbance Activity, Regulated Activity, and Regulated Earth Disturbance Activity. These should be used nearly verbatim.</p> <p>Your ordinance should contain definitions for each of the following terms that are substantially consistent with the definitions given herein?</p> <p><u>Best Management Practice (BMP)</u>: Activities, facilities, designs, measures, or procedures used to manage stormwater impacts from regulated activities, to meet state water quality requirements, to promote groundwater recharge, and to otherwise meet the purposes of this Ordinance. Stormwater BMPs are commonly grouped into one of two broad categories or measures: “structural” or “nonstructural.” In this Ordinance, nonstructural BMPs or measures refer to operational and/or behavior-related practices that attempt to minimize the contact of pollutants with stormwater runoff whereas structural BMPs or measures are those that consist of a physical device or practice that is installed to capture and treat stormwater runoff. Structural BMPs include, but are not limited to, a wide variety of practices and devices, from large-scale retention ponds and constructed wetlands, to small-scale underground treatment systems, infiltration facilities, filter strips, low impact design, bioretention, wet ponds, permeable paving, grassed swales, riparian or forested buffers, sand filters, detention basins, and manufactured devices. Structural stormwater BMPs are permanent appurtenances to the project site.</p> <p><u>DEP</u>: The Pennsylvania Department of Environmental Protection</p> <p><u>Municipality</u>: (municipality name), (county name) County, Pennsylvania.</p> <p><u>Regulated Activity</u>: Any activity that may affect stormwater runoff and any activities that may contribute non-stormwater discharges to a regulated small MS4.</p> <p><u>State Water Quality Requirements</u>: The regulatory requirements to protect, maintain, reclaim, and restore water quality under Title 25 of the Pennsylvania Code and the Clean Streams Law.</p> <p><u>Stormwater</u>: Drainage runoff from the surface of the land resulting from precipitation or snow or ice melt.</p> <p><u>Waters of this Commonwealth</u>: Any and all rivers, streams, creeks, rivulets, impoundments, ditches, watercourses, storm sewers, lakes, dammed water, wetlands, ponds, springs, and all other bodies or channels of conveyance of surface and underground water, or parts thereof, whether natural or artificial, within or on the boundaries of this Commonwealth.</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

	Yes	No	DEP Use
<p>Article III. Stormwater Management Requirements</p> <p>Does your stormwater management ordinance require the following:</p> <ul style="list-style-type: none"> • Earth Disturbance Activity must meet all requirements of 25 Pa. Code §102? • Notification of adjacent property owners by a developer when stormwater flows onto their property may be altered? • Proper long-term operation and maintenance of stormwater management BMPs 	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<p>Article IV. Operation and Maintenance</p> <p>Does your stormwater management ordinance require the following:</p> <ul style="list-style-type: none"> • Stormwater management BMPs to be recorded as deed covenants? • Stormwater management O&M Plans and Agreements to be recorded as deed covenants? • Enforcement if provisions of the Ordinance including the requirements of O&M Plans are not satisfied? • Authorize the municipality to perform O&M when the owner does not? • Authorize the municipality to charge the owner and place a lien against property if owners don't reimburse the municipality? 	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Date Your Stormwater Management Ordinance Was Enacted

Provide the ordinance number and date of your municipality's most recently enacted stormwater management ordinance:

Ordinance Number: _____

Date of Enactment: _____

Names and Signatures

Name(s) and signature(s) of person or people responsible for providing the information in this checklist:

Name Signature Date

Name Signature Date

Name Signature Date

Name Signature Date

Name and Signature of Municipal Solicitor

Name and signature of the municipal solicitor attesting to the legality and accuracy of the information provided in this checklist by the above named persons:

Name of Solicitor Signature of Solicitor Date

MS4 STORMWATER MANAGEMENT ORDINANCE CHECKLIST

	Yes	No	DEP Use																								
<p>Outline</p> <p>The following list of sections represents content that must be present in an MS4 stormwater management ordinance. The order may vary. Does your stormwater management ordinance contain all of these sections, or their equivalents?</p> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left; border-bottom: 1px solid black;"><u>Article</u></th> <th style="text-align: left; border-bottom: 1px solid black;"><u>Title</u></th> </tr> </thead> <tbody> <tr><td>I</td><td>General Provisions</td></tr> <tr><td>II</td><td>Definitions</td></tr> <tr><td>III</td><td>Stormwater Management Standards</td></tr> <tr><td>IV</td><td>Stormwater Management Site Plan Requirements</td></tr> <tr><td>V</td><td>Operation and Maintenance</td></tr> <tr><td>VI</td><td>Fees and Expenses</td></tr> <tr><td>VII</td><td>Prohibitions</td></tr> <tr><td>VIII</td><td>Enforcement and Penalties</td></tr> <tr><td>IX</td><td>References</td></tr> <tr><td>Appendix A</td><td>Operation and Maintenance Agreement</td></tr> <tr><td>Appendix B</td><td>Worksheets for Computing Expected Pollutant Loads from Specific Land Uses</td></tr> </tbody> </table>	<u>Article</u>	<u>Title</u>	I	General Provisions	II	Definitions	III	Stormwater Management Standards	IV	Stormwater Management Site Plan Requirements	V	Operation and Maintenance	VI	Fees and Expenses	VII	Prohibitions	VIII	Enforcement and Penalties	IX	References	Appendix A	Operation and Maintenance Agreement	Appendix B	Worksheets for Computing Expected Pollutant Loads from Specific Land Uses	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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IX	References																										
Appendix A	Operation and Maintenance Agreement																										
Appendix B	Worksheets for Computing Expected Pollutant Loads from Specific Land Uses																										
<p>Article I, Section 102. Findings</p> <p>Does your ordinance contain a “findings” section that includes the following four items?</p> <p>Federal and state regulations require this municipality to obtain a permit for discharges from its MS4 and to implement a program of stormwater controls.</p> <p>Inadequate management of stormwater causes loss of water quality, flooding, and other problems.</p> <p>A comprehensive program of stormwater management including regulation will help to solve the problems.</p> <p>Stormwater is an important resource.</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>																								
<p>Article I, Section 103. Purpose</p> <p>Does your ordinance contain a “purpose” section that includes the following four items?</p> <p>Meet NPDES MS4 permit requirements.</p> <p>Meet state water quality requirements</p> <p>Prevent accelerated erosion, scour, aggradation, and degradation.</p> <p>Provide procedures and standards for stormwater planning and management.</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>																								
<p>Article I, Section 104. Authority</p> <p>Does your ordinance contain an “authority” section that includes the following items?</p> <ol style="list-style-type: none"> 1. Applicable municipal code. 2. Pennsylvania Municipalities Planning Code 	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>																								
<p>Article I, Section 105. Applicability</p> <p>Does your stormwater management ordinance apply to all discharges to the municipality’s regulated MS4, including discharges from Regulated Earth Disturbance activities?</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>																								

	Yes	No	DEP Use
<p>Article I, Section 106. Repealer</p> <p>Does your ordinance contain a “repealer” clause, or has your municipality taken other action, to repeal all provisions in all municipal ordinances and regulations that are inconsistent with your current MS4 stormwater management ordinance?</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<p>Article I, Section 107. Severability</p> <p>Does your ordinance contain a “severability” provision to ensure that all other sections of this ordinance survive in the event a court declares any specific sections invalid?</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<p>Article I, Section 108. Compatibility</p> <p>Does your ordinance contain a “compatibility” provision as a reminder that municipal approvals issued under this ordinance do not satisfy approval requirements under other laws.</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<p>Article II. Definitions</p> <p>Definitions of the following terms are necessary; however, the wording may vary to some extent from the wording shown below. Critical definitions include: Earth Disturbance Activity, Regulated Activity, and Regulated Earth Disturbance Activity. These should be used nearly verbatim.</p> <p>Does your ordinance contain definitions for each of the following terms that are substantially consistent with the definitions given herein?</p> <p><u>Agricultural Activity</u>: Activities associated with agriculture such as agricultural cultivation, agricultural operation, and animal heavy use areas. This includes the work of producing crops including tillage, land clearing, plowing, disking, harrowing, planting, harvesting crops or pasturing and raising of livestock and installation of conservation measures. Construction of new buildings or impervious area is not considered an agricultural activity.</p> <p><u>Applicant</u>: A landowner, developer, or other person who has filed an application to the municipality for approval to engage in any regulated activity at a project site in the municipality.</p> <p><u>Best Management Practice (BMP)</u>: Activities, facilities, designs, measures, or procedures used to manage stormwater impacts from regulated activities, to meet state water quality requirements, to promote groundwater recharge, and to otherwise meet the purposes of this Ordinance. Stormwater BMPs are commonly grouped into one of two broad categories or measures: “structural” or “nonstructural.” In this Ordinance, nonstructural BMPs or measures refer to operational and/or behavior-related practices that attempt to minimize the contact of pollutants with stormwater runoff whereas structural BMPs or measures are those that consist of a physical device or practice that is installed to capture and treat stormwater runoff. Structural BMPs include, but are not limited to, a wide variety of practices and devices, from large-scale retention ponds and constructed wetlands, to small-scale underground treatment systems, infiltration facilities, filter strips, low impact design, bioretention, wet ponds, permeable paving, grassed swales, riparian or forested buffers, sand filters, detention basins, and manufactured devices. Structural stormwater BMPs are permanent appurtenances to the project site.</p> <p><u>Design Storm</u>: The magnitude and temporal distribution of precipitation from a storm event measured in probability of occurrence (e.g., a 5-year storm) and duration (e.g., 24 hours) used in the design and evaluation of stormwater management systems. Also see Return Period.</p> <p><u>DEP</u>: The Pennsylvania Department of Environmental Protection</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<p><u>Earth Disturbance Activity</u>: A construction or other human activity which disturbs the surface of the land, including, but not limited to: clearing and grubbing; grading; excavations; embankments; road maintenance; building construction; and the moving, depositing, stockpiling, or storing of soil, rock, or earth materials.</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

	Yes	No	DEP Use
<u>Forest Management / Timber Operations</u> : Planning and activities necessary for the management of forestland. These include conducting a timber inventory, preparation of forest management plans, silvicultural treatment, cutting budgets, logging road design and construction, timber harvesting, site preparation, and reforestation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<u>Hydrologic Soil Group</u> : Infiltration rates of soils vary widely and are affected by subsurface permeability as well as surface intake rates. Soils are classified into four HSGs (A, B, C, and D) according to their minimum infiltration rate, which is obtained for bare soil after prolonged wetting. The NRCS defines the four groups and provides a list of most of the soils in the United States and their group classification. The soils in the area of the development site may be identified from a soil survey report that can be obtained from local NRCS offices or conservation district offices. Soils become less pervious as the HSG varies from A to D (NRCS ^{3,4})	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<u>Impervious Surface (Area)</u> : A surface that prevents the infiltration of water into the ground. Impervious surfaces (or areas) shall include, but not be limited to: roofs; additional indoor living spaces, patios, garages, storage sheds and similar structures; and any new streets or sidewalks. Decks, parking areas, and driveway areas are not counted as impervious areas if they do not prevent infiltration.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<u>Karst</u> : A type of topography or landscape characterized by surface depressions, sinkholes, rock pinnacles/uneven bedrock surface, underground drainage, and caves. Karst is formed on carbonate rocks, such as limestone or dolomite.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<u>Land Development</u> : Inclusive of any or all of the following meanings: (i) the improvement of one lot or two or more contiguous lots, tracts, or parcels of land for any purpose involving (a) a group of two or more buildings or (b) the division or allocation of land or space between or among two or more existing or prospective occupants by means of, or for the purpose of streets, common areas, leaseholds, condominiums, building groups, or other features; (ii) any subdivision of land; (iii) development in accordance with Section 503(1.1) of the PA Municipalities Planning Code.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<u>Municipality</u> : (municipality name), (county name) County, Pennsylvania.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<u>Project Site</u> : The specific area of land where any regulated activities in the municipality are planned, conducted, or maintained.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<u>Qualified Person or Qualified Professional</u> : Any person licensed by the Pennsylvania Department of State or otherwise qualified by law to perform the work required by this Ordinance.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<u>Regulated Activity</u> : Any earth disturbance activities or any activities that involve the alteration or development of land in a manner that may affect stormwater runoff.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<u>Regulated Earth Disturbance Activity</u> : Activity involving earth disturbance subject to regulation under 25 Pa. Code 92a, 25 Pa. Code 102, or the Clean Streams Law.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<u>Runoff</u> : Any part of precipitation that flows over the land.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<u>State Water Quality Requirements</u> : The regulatory requirements to protect, maintain, reclaim, and restore water quality under Title 25 of the Pennsylvania Code and the Clean Streams Law.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<u>Stormwater</u> : Drainage runoff from the surface of the land resulting from precipitation or snow or ice melt.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<u>Stormwater Management Plan</u> : The (name of stormwater management plan) for managing stormwater runoff adopted by the county of (county name) as required by the Act of October 4, 1978, P.L. 864, (Act 167), as amended, and known as the "Storm Water Management Act."	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<u>Stormwater Management Site Plan</u> : The plan prepared by the developer or his representative indicating how stormwater runoff will be managed at the development site in accordance with this Ordinance. Stormwater Management Site Plan will be designated as SWM Site Plan throughout this Ordinance.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

	Yes	No	DEP Use
<u>Waters of this Commonwealth</u> : Any and all rivers, streams, creeks, rivulets, impoundments, ditches, watercourses, storm sewers, lakes, dammed water, wetlands, ponds, springs, and all other bodies or channels of conveyance of surface and underground water, or parts thereof, whether natural or artificial, within or on the boundaries of this Commonwealth.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<u>Watershed</u> : Region or area drained by a river, watercourse, or other surface water of this Commonwealth.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Article III, Section 301. General Requirements Have you reviewed the permitting requirements in your stormwater management ordinance for consistency with requirements in DEP's NPDES permits for stormwater discharges associated with construction activities? Does each of the following general requirements appear in your ordinance?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<ul style="list-style-type: none"> • A stormwater management site plan must be submitted and approved before any regulated activities commence, unless this ordinance provides an exemption from the plan submission requirement. • All activities (especially all earth disturbance activities) must comply with this ordinance, Title 25 of the PA Code, and the CSL • Provisions (kick-out clause) for handling projects that propose alternative control measures not covered in this Ordinance • Does your ordinance require the municipality to obtain DEP's assistance to evaluate and approve alternative control measures • Plans available on-site during construction • How to measure impervious areas • State whether existing impervious areas are subject to volume and rate controls (i.e. are retrofits required?). • Notification of adjacent property owners. • Requirements and considerations for karst areas. • Infiltration BMPs spread out and shallow as much as practicable. • Requirement that normally dry, open-top, storage BMPs should drain in 24 to 72 hours from end of storm. • Precipitation values taken from, or consistent with, NOAA Atlas 14. • LID should be used to maximum extent practicable. • Reference to DEP Stormwater BMP Manual, as amended and updated. 	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Article III, Section 302. Exemptions Does your ordinance exempt only specific small activities from requirements to prepare, submit, and obtain approvals for stormwater management site plans? Do your exemptions apply to regulated activities (projects) that result in cumulative earth disturbances less than one acre? Does your ordinance exempt from permitting requirements agriculture and silviculture activities that are conducted according to the requirements of 25 Pa. Code 102.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

	Yes	No	DEP Use
Article III, Section 303. Performance Standards			
Does your stormwater management ordinance contain performance standards that meet or exceed the following requirements?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Performance standard bench-mark:			
Stormwater controls for new impervious cover must produce 0.1" or less of runoff from 1-year, 24-hour storm to your regulated MS4.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
No increase in peaks for the 1-year through the 100-year event.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Are the performance standards in your ordinance:			
Stated in simple language?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Easy to understand?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Numerical with common units that are easy to measure	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Do the performance standards in your ordinance include:			
Volume control standards?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Peak rate control standards?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Article IV. Plan Requirements			
Does your ordinance specify the following?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
• Provisions for handling deficient plans.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
• Provisions for easements (or other property rights) to provide access to maintain PCSM BMPs.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
• Provisions for conservation easements.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
• Submission and approval procedures for E&S plans.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
• Content and style requirements for design computations, plan drawings, profile drawings, and construction schedules.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
• Presentation standards for showing adjacent properties.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
• Presentation standards for showing source water facilities, waste-water facilities, drainage structures, and related features.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
• Requirements for recording for easements	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Article V. Operation and Maintenance			
Does your ordinance require the following for development and redevelopment projects?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
• Operation and Maintenance (O&M) agreements for stormwater management BMPs greater than a specific size or complexity?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
• (O&M) agreements must include a schedule, and detailed instructions on what tasks must be performed, and on what frequency?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
• O&M responsibilities of developers during construction?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
• O&M responsibilities of landowners for PCSM BMPs?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
• Provisions for a performance guarantee during construction and for post-construction operation and maintenance of BMPs?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
• A requirement that O&M plans must be recorded as a restrictive deed covenant that runs with the land?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

	Yes	No	DEP Use
Article VIII. Enforcement			
Does your stormwater management ordinance provide the following authorities for the municipality:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
• Right of entry – municipality may enter to inspect PCSM BMPs.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
• The authority to inspect PCSM BMPs and on what frequency.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
• Require inspections or monitoring of PCSM BMPs and on what frequency.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
• The types of enforcement actions the municipality may use.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
• To suspend or revoke permits.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
• To reinstate suspended permits.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
• To invoke penalties for violating the ordinance or permits	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Does your ordinance provide rights to the public to appeal municipal decisions or actions?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Operation and Maintenance (O&M) Agreement Form			
Does your stormwater management ordinance contain an O&M agreement form?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Technical Appendices			
Does your stormwater management ordinance contain technical appendices?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Technical Content:			
Does your stormwater management ordinance contain any of the following requirements?			
• The use of obsolete methodologies or software?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
• The use of obsolete or out-of-print documents?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Does your stormwater management ordinance provide waivers or exemptions from major requirements in your ordinance or from the entire ordinance?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Date Your Stormwater Management Ordinance Was Enacted

Provide the ordinance number and date of your municipality's most recently enacted stormwater management ordinance:

Ordinance Number: _____

Date of Enactment: _____

Names and Signatures

Name(s) and signature(s) of person or people responsible for providing the information in this checklist:

_____	_____	_____
Name	Signature	Date
_____	_____	_____
Name	Signature	Date
_____	_____	_____
Name	Signature	Date
_____	_____	_____
Name	Signature	Date

Name and Signature of Municipal Solicitor

Name and signature of the municipal solicitor attesting to the legality and accuracy of the information provided in this checklist by the above named persons:

_____	_____	_____
Name of Solicitor	Signature of Solicitor	Date



**GENERAL PERMIT PAG-13
FOR STORMWATER DISCHARGES
FROM SMALL MUNICIPAL SEPARATE STORM SEWER SYSTEMS (MS4s)
MS4 STORMWATER MANAGEMENT ORDINANCES**

EXECUTIVE SUMMARY AND INSTRUCTIONS

Federal regulations require municipalities designated by federal regulations or DEP to obtain permits and to develop and implement a Stormwater Management Program (SWMP).

The SWMP requires permittees to adopt, implement, and enforce a stormwater ordinance. If in the NOI, you checked box MCM #4.A, then you must follow the instructions in paragraph A below. If you checked box MCM #4.B, then you must follow the instructions in paragraph B below.

- A. If you will rely on DEP's statewide program for issuing NPDES Permits for Stormwater Discharges Associated with Construction Activities to satisfy all requirements under this MCM #4 and all requirements under BMPs #1 through #3 of MCM #5, then you must satisfy one of the following three statements:
1. Enact, implement, and enforce an ordinance from an Act 167 Plan approved by DEP in 2005 or later; or
 2. Enact the MS4 Operation and Maintenance Ordinance; or
 3. Enact an ordinance that satisfies all applicable requirements in a completed and signed MS4 Operation and Maintenance Ordinance Checklist.
- B. If you will not be relying on DEP's statewide program DEP's program for issuing NPDES Permits for Stormwater Discharges Associated with Construction Activities, then you must satisfy one of the following three statements:
1. Enact, implement, and enforce an ordinance from an Act 167 Plan approved by DEP in 2005 or later; or
 2. Enact the MS4 Stormwater Management Ordinance; or
 3. Enact an ordinance that satisfies all applicable requirements in a completed and signed MS4 Stormwater Management Ordinance Checklist.

This requirement to enact a suitable stormwater management ordinance must be satisfied by new permittees within the first 12 months following the date coverage commences as stated on the Approval of General Permit Coverage. New permittees must indicate how this requirement will be met in the Notice of Intent and they must report that implementation of the ordinance was completed in the first annual report.

Renewal permittees must continue to maintain, update, implement, and enforce a Stormwater Management Ordinance that satisfies all applicable requirements.

Permittees choosing to use the MS4 Operation and Maintenance Ordinance, or the MS4 Stormwater Management Ordinance must adopt and implement, without omissions, the entire ordinance to ensure adequate protection of public health and safety and of water quality. The following steps are necessary for implementation of one of these ordinances:

A. Article II – Definitions

Municipality: Insert municipal name and county, as indicated.

- B. The municipal solicitor should review Article VIII – Enforcement and Penalties, and make any revisions necessary to ensure appropriate enforcement is provided commensurate with the applicable municipal code.**

Permittees enacting a modified version of either ordinance must complete, sign, and submit with the NOI either the MS4 Operation and Maintenance Ordinance Checklist, or the MS4 Stormwater Management Ordinance Checklist, or apply for coverage under an Individual Permit.

Appendix B to the MS4 Stormwater Management Ordinance contains worksheets 11, 12, and 13 from Chapter 8 of the Pennsylvania Stormwater Best Management Practices Manual (DEP, 2006). These worksheets are useful for computing expected stormwater pollutant loads for common land uses and for computing the resulting loads after the application of the most common stormwater management BMPs.

MS4 OPERATION AND MAINTENANCE ORDINANCE

ORDINANCE NO. _____

MUNICIPALITY OF

_____ COUNTY, PENNSYLVANIA

Adopted at a Public Meeting Held on

_____, 20____

Article I – General Provisions

- Section 101. Short Title
- Section 102. Statement of Findings
- Section 103. Purpose
- Section 104. Statutory Authority
- Section 105. Applicability
- Section 106. Repealer
- Section 107. Severability
- Section 108. Compatibility with Other Requirements

Article II – Definitions

Article III – Stormwater Management Requirements

- Section 301. General Requirements

Article IV – Operation and Maintenance

- Section 401. Responsibilities of Developers and Landowners
- Section 402. Operation and Maintenance Agreements

Article V – Prohibitions

- Section 501. Prohibited Discharges and Connections
- Section 502. Roof Drains and Sump Pumps

Article VI – Enforcement and Penalties

- Section 601. Right-of-Entry
- Section 602. Inspection
- Section 603. Enforcement
- Section 604. Suspension and Revocation
- Section 605. Penalties
- Section 606. Appeals

Article VII – References

ARTICLE I - GENERAL PROVISIONS

Section 101. Short Title

This Ordinance shall be known and may be cited as the “(Name of municipality and name of watershed plan, if applicable) MS4 Prohibited Discharge Ordinance.”

Section 102. Statement of Findings

The governing body of the municipality finds that:

- A. Inadequate maintenance of stormwater facilities contributes to erosion and sedimentation, overtaxes the carrying capacity of streams and storm sewers, increases the cost of public facilities to carry and control stormwater, undermines flood plain management and flood control efforts in downstream communities, reduces groundwater recharge, threatens public health and safety, and increases pollution of water resources.
- B. Reasonable regulation of connections and discharges to municipal separate stormsewer systems is fundamental to the public health, safety, and welfare and the protection of people of the Commonwealth, their resources, and the environment.
- C. Stormwater is an important water resource, which provides groundwater recharge for water supplies and base flow of streams, which also protects and maintains surface water quality.
- D. Federal and state regulations require certain municipalities to obtain a permit for stormwater discharges from their separate storm sewer systems under the National Pollutant Discharge Elimination System (NPDES). Permittees are required to enact, implement, and enforce a prohibition of non-stormwater discharges to the permittee’s regulated small municipal separate stormsewer systems (MS4s).

Section 103. Purpose

The purpose of this Ordinance is to promote health, safety, and welfare within the municipality and its watershed by minimizing the harms and maximizing the benefits described in Section 102 of this Ordinance, through provisions designed to:

- A. Provide standards to meet NPDES permit requirements.
- B. Meet legal water quality requirements under state law, including regulations at 25 Pa. Code 93 to protect, maintain, reclaim, and restore the existing and designated uses of the waters of this Commonwealth.
- C. Preserve the natural drainage systems as much as possible.
- D. Maintain groundwater recharge to prevent degradation of surface and groundwater quality and to otherwise protect water resources.
- E. Prevent scour and erosion of stream banks and streambeds.

- F. Provide proper operation and maintenance of all facilities and all SWM BMPs that are implemented within the municipality.

Section 104. Statutory Authority

The municipality also is empowered to regulate land use activities that affect runoff by the authority of the Act of July 31, 1968, P.L. 805, No. 247, The Pennsylvania Municipalities Planning Code, as amended.

Section 105. Applicability

All activities related to proper operation and maintenance of approved stormwater management BMPs and all activities that may contribute non-stormwater discharges to a regulated small MS4 are subject to regulation by this Ordinance.

Section 106. Repealer

Any other ordinance provision(s) or regulation of the municipality inconsistent with any of the provisions of this Ordinance is hereby repealed to the extent of the inconsistency only.

Section 107. Severability

In the event that a court of competent jurisdiction declares any section or provision of this Ordinance invalid, such decision shall not affect the validity of any of the remaining provisions of this Ordinance.

Section 108. Compatibility with Other Requirements

Actions taken under this Ordinance do not affect any responsibility, permit or approval for any activity regulated by any other code, law, regulation, or ordinance.

ARTICLE II - DEFINITIONS

For the purposes of this Ordinance, certain terms and words used herein shall be interpreted as follows:

- A. Words used in the present tense include the future tense; the singular number includes the plural, and the plural number includes the singular; words of masculine gender include feminine gender; and words of feminine gender include masculine gender.
- B. The word “includes” or “including” shall not limit the term to the specific example but is intended to extend its meaning to all other instances of like kind and character.
- C. The words “shall” and “must” are mandatory; the words “may” and “should” are permissive.

Best Management Practice (BMP) – Activities, facilities, designs, measures, or procedures used to manage stormwater impacts from regulated activities, to meet state water quality requirements, to promote groundwater recharge, and to otherwise meet the purposes of this Ordinance. Stormwater BMPs are commonly grouped into one of two broad categories or measures: “structural” or “nonstructural.” In this Ordinance, nonstructural BMPs or measures refer to operational and/or behavior-related practices that attempt to minimize the contact of pollutants with stormwater runoff whereas structural BMPs or measures are those that consist of a physical device or practice that is installed to capture and treat stormwater runoff. Structural BMPs include, but are not limited to, a wide variety of practices and devices, from large-scale retention ponds and constructed wetlands, to small-scale underground treatment systems, infiltration facilities, filter strips, low impact design, bioretention, wet ponds, permeable paving, grassed swales, riparian or forested buffers, sand filters, detention basins, and manufactured devices. Structural stormwater BMPs are permanent appurtenances to the project site.

Conservation District – A conservation district, as defined in Section 3(c) of the Conservation District Law (3 P. S. § 851(c)) that has the authority under a delegation agreement executed with DEP to administer and enforce all or a portion of the regulations promulgated under 25 Pa. Code 102.

DEP – The Pennsylvania Department of Environmental Protection.

Earth Disturbance Activity – A construction or other human activity which disturbs the surface of the land, including, but not limited to: clearing and grubbing; grading; excavations; embankments; road maintenance; building construction; and the moving, depositing, stockpiling, or storing of soil, rock, or earth materials. Earth disturbance activity is subject to regulation under 25 Pa. Code 92, 25 Pa. Code 102, or the Clean Streams Law.

Municipality – (municipality name), (county name) County, Pennsylvania.

NRCS – USDA Natural Resources Conservation Service (previously SCS).

Regulated Activities – Any activities that may affect stormwater runoff and any activities that may contribute non-stormwater discharges to a regulated small MS4.

State Water Quality Requirements – The regulatory requirements to protect, maintain, reclaim, and restore water quality under Title 25 of the Pennsylvania Code and the Clean Streams Law.

Stormwater – Drainage runoff from the surface of the land resulting from precipitation or snow or ice melt.

USDA – United States Department of Agriculture.

Waters of this Commonwealth – Any and all rivers, streams, creeks, rivulets, impoundments, ditches, watercourses, storm sewers, lakes, dammed water, wetlands, ponds, springs, and all other bodies or channels of conveyance of surface and underground water, or parts thereof, whether natural or artificial, within or on the boundaries of this Commonwealth.

ARTICLE III – STORMWATER MANAGEMENT REQUIREMENTS

Section 301. General Requirements

- A. For all regulated earth disturbance activities, erosion and sediment control BMPs shall be designed, implemented, operated, and maintained during the regulated earth disturbance activities (e.g., during construction) to meet the purposes and requirements of this Ordinance and to meet all requirements under Title 25 of the Pennsylvania Code and the Clean Streams Law. Various BMPs and their design standards are listed in the *Erosion and Sediment Pollution Control Program Manual (E&S Manual)*², No. 363-2134-008 (April 15, 2000), as amended and updated.
- B. Stormwater flows onto adjacent property shall not be created, increased, decreased, relocated, or otherwise altered without written notification of the adjacent property owner(s) by the developer. Such stormwater flows shall be subject to the requirements of this Ordinance.
- C. For all regulated activities, SWM BMPs shall be implemented, operated, and maintained to meet the purposes and requirements of this Ordinance and to meet all requirements under Title 25 of the Pennsylvania Code, the Clean Streams Law, and the Storm Water Management Act.
- D. Various BMPs and their design standards are listed in the BMP Manual¹.

ARTICLE IV – OPERATION AND MAINTENANCE

Section 401. Responsibilities of Developers and Landowners

- A. Facilities, areas, or structures used as Stormwater Management BMPs shall be enumerated as permanent real estate appurtenances and recorded as deed restrictions or conservation easements that run with the land.
- B. O&M Plans for stormwater management approved pursuant to 25 Pa. Code §102 after the date of this Ordinance shall be recorded as a restrictive deed covenant that runs with the land.
- C. The municipality may take enforcement actions against an owner for any failure to satisfy the provisions of this Ordinance.

Section 402. Operation and Maintenance Agreements

- A. Prior to completing construction of a SWM Site Plan, the property owner shall sign and record an Operation and Maintenance (O&M) Agreement (see Appendix A) covering all stormwater control facilities which are to be privately owned.
 - 1. The owner, successor and assigns shall operate and maintain all facilities in accordance with the approved schedule(s) in the O&M Plan.
 - 2. The owner shall convey to the Municipality conservation easements to assure access for periodic inspections by the Municipality and maintenance, as necessary.
 - 3. The owner shall keep on file with the Municipality the name, address, and telephone number of the person or company responsible for operation and maintenance activities. In the event of a change, new information shall be submitted by the owner to the Municipality within ten (10) working days of the change.
- B. The owner is responsible for operation and maintenance (O&M) of the SWM BMPs. If the owner fails to adhere to the O&M Agreement, the municipality may perform the services required and charge the owner appropriate fees. Nonpayment of fees may result in a lien against the property.

ARTICLE V - PROHIBITIONS

Section 501. Prohibited Discharges and Connections

- A. Any drain or conveyance, whether on the surface or subsurface, that allows any non-stormwater discharge including sewage, process wastewater, and wash water to enter a regulated small MS4 or to enter the waters of this Commonwealth is prohibited.
- B. No person shall allow, or cause to allow, discharges into a regulated small MS4, or discharges into waters of this Commonwealth, which are not composed entirely of stormwater, except (1) as provided in Subsection C below and (2) discharges allowed under a state or federal permit.
- C. The following discharges are authorized unless they are determined to be significant contributors to pollution a regulated small MS4 or to the waters of this Commonwealth:

- Discharges from firefighting activities	- Flows from riparian habitats and wetlands
- Potable water sources including water line flushing	- Uncontaminated water from foundations or from footing drains
- Irrigation drainage	- Lawn watering
- Air conditioning condensate	- Dechlorinated swimming pool discharges
- Springs	- Uncontaminated groundwater
- Water from crawl space pumps	- Water from individual residential car washing
- Pavement wash waters where spills or leaks of toxic or hazardous materials have not occurred (unless all spill material has been removed) and where detergents are not used	- Routine external building wash down (which does not use detergents or other compounds)
Diverted stream flows	

- D. In the event that the municipality or DEP determines that any of the discharges identified in Subsection C significantly contribute pollutants to a regulated small MS4 or to the waters of this Commonwealth, the municipality or DEP will notify the responsible person(s) to cease the discharge.

Section 502. Roof Drains and Sump Pumps

Roof drains and sump pumps shall discharge to infiltration or vegetative BMPs.

ARTICLE VI – ENFORCEMENT AND PENALTIES

Section 601. Right-of-Entry

Upon presentation of proper credentials, the municipality may enter at reasonable times upon any property within the municipality to inspect the condition of the stormwater structures and facilities in regard to any aspect regulated by this Ordinance.

Section 602. Inspection

SWM BMPs should be inspected by the landowner, or the owner's designee (including the municipality for dedicated and owned facilities), according to the following list of minimum frequencies:

1. Annually for the first 5 years following construction.
2. Once every 3 years thereafter.
3. During or immediately after the cessation of a 10-year or greater storm.

Section 603. Enforcement

It is unlawful for any person to modify, remove, fill, landscape, or alter any approved SWM BMPs, facilities, areas, or structures without the written approval of DEP or a delegated County Conservation District, and the Municipality.

Section 604. Suspension and Revocation

- A. Any approval or permit issued by the municipality may be suspended or revoked for:
1. Non-compliance with or failure to implement any provision of an approved SWM Site Plan or O&M Agreement.
 2. A violation of any provision of this Ordinance or any other applicable law, ordinance, rule, or regulation relating to a Regulated Activity.
 3. The creation of any condition or the commission of any act which constitutes or creates a hazard, nuisance, pollution, or endangers the life or property of others.
- B. A suspended approval may be reinstated by the municipality when:
1. The municipality has inspected and approved the corrections to the violations that caused the suspension.
 2. The municipality is satisfied that the violation has been corrected.
- C. An approval that has been revoked by the municipality cannot be reinstated. The applicant may apply for a new approval under the provisions of this Ordinance.

- D. If a violation causes no immediate danger to life, public health, or property, at its sole discretion, the municipality may provide a limited time period for the owner to correct the violation. In these cases, the municipality will provide the owner, or the owner's designee, with a written notice of the violation and the time period allowed for the owner to correct the violation. If the owner does not correct the violation within the allowed time period, the municipality may revoke or suspend any, or all, applicable approvals and permits pertaining to any provision of this Ordinance.

Section 605. Penalties

[Municipalities should ask their solicitors to provide appropriate wording for this section.]

- A. Anyone violating the provisions of this Ordinance shall be guilty of a summary offense, and upon conviction, shall be subject to a fine of not more than \$_____ for each violation, recoverable with costs. Each day that the violation continues shall be a separate offense and penalties shall be cumulative.
- B. In addition, the municipality may institute injunctive, mandamus, or any other appropriate action or proceeding at law or in equity for the enforcement of this Ordinance. Any court of competent jurisdiction shall have the right to issue restraining orders, temporary or permanent injunctions, mandamus, or other appropriate forms of remedy or relief.

Section 606. Appeals

- A. Any person aggrieved by any action of the municipality or its designee, relevant to the provisions of this Ordinance, may appeal to the municipality within 30 days of that action.
- B. Any person aggrieved by any decision of the municipality, relevant to the provisions of this Ordinance, may appeal to the County Court of Common Pleas in the county where the activity has taken place within 30 days of the municipality's decision.

ARTICLE VII – REFERENCES

1. Pennsylvania Department of Environmental Protection. No. 363-0300-002 (December 2006), as amended and updated. *Pennsylvania Stormwater Best Management Practices Manual*. Harrisburg, PA.
2. Pennsylvania Department of Environmental Protection. No. 363-2134-008 (April 15, 2000), as amended and updated. *Erosion and Sediment Pollution Control Program Manual*. Harrisburg, PA.

(Ordinance Name)

(Ordinance Number)

ENACTED and **ORDAINED** at a regular meeting of the

on this _____ day of _____, 20____.

This Ordinance shall take effect immediately.

(Name)

(Title)

(Name)

(Title)

(Name)

(Title)

ATTEST:

Secretary

APPENDIX A

**OPERATION AND MAINTENANCE (O&M) AGREEMENT
STORMWATER MANAGEMENT BEST MANAGEMENT PRACTICES (SWM BMPs)**

THIS AGREEMENT, made and entered into this _____ day of _____, 20____, by and between _____, (hereinafter the "Landowner"), and _____ County, Pennsylvania, (hereinafter "Municipality");

WITNESSETH

WHEREAS, the Landowner is the owner of certain real property as recorded by deed in the land records of _____ County, Pennsylvania, Deed Book _____ at page _____, (hereinafter "Property").

WHEREAS, the Landowner is proceeding to build and develop the Property; and

WHEREAS, the SWM BMP Operation and Maintenance (O&M) Plan approved by the Municipality (hereinafter referred to as the "O&M Plan") for the property identified herein, which is attached hereto as Appendix A and made part hereof, as approved by the Municipality, provides for management of stormwater within the confines of the Property through the use of BMPs; and

WHEREAS, the Municipality, and the Landowner, his successors and assigns, agree that the health, safety, and welfare of the residents of the Municipality and the protection and maintenance of water quality require that on-site SWM BMPs be constructed and maintained on the Property; and

WHEREAS, the Municipality requires, through the implementation of the SWM Site Plan, that SWM BMPs as required by said SWM Site Plan and the Municipal Stormwater Management Ordinance be constructed and adequately operated and maintained by the Landowner, successors, and assigns.

NOW, THEREFORE, in consideration of the foregoing promises, the mutual covenants contained herein, and the following terms and conditions, the parties hereto agree as follows:

1. The Landowner shall construct the BMPs in accordance with the plans and specifications identified in the SWM Site Plan.
2. The Landowner shall operate and maintain the BMPs as shown on the SWM Plan in good working order in accordance with the specific operation and maintenance requirements noted on the approved O&M Plan.
3. The Landowner hereby grants permission to the Municipality, its authorized agents and employees, to enter upon the property, at reasonable times and upon presentation of proper credentials, to inspect the BMPs whenever necessary. Whenever possible, the Municipality shall notify the Landowner prior to entering the property.
4. In the event the Landowner fails to operate and maintain the BMPs per paragraph 2, the Municipality or its representatives may enter upon the Property and take whatever action is deemed necessary to maintain said BMP(s). It is expressly understood and agreed that the Municipality is under no obligation to maintain or repair said facilities, and in no event shall this Agreement be construed to impose any such obligation on the Municipality.
5. In the event the Municipality, pursuant to this Agreement, performs work of any nature, or expends any funds in performance of said work for labor, use of equipment, supplies, materials, and the like, the Landowner shall reimburse the Municipality for all expenses (direct and indirect) incurred within 10 days of receipt of invoice from the Municipality.

6. The intent and purpose of this Agreement is to ensure the proper maintenance of the onsite BMPs by the Landowner; provided, however, that this Agreement shall not be deemed to create or affect any additional liability of any party for damage alleged to result from or be caused by stormwater runoff.
7. The Landowner, its executors, administrators, assigns, and other successors in interests, shall release the Municipality from all damages, accidents, casualties, occurrences, or claims which might arise or be asserted against said employees and representatives from the construction, presence, existence, or maintenance of the BMP(s) by the Landowner or Municipality.
8. The Municipality intends to inspect the BMPs at a minimum of once every three years to ensure their continued functioning.

This Agreement shall be recorded at the Office of the Recorder of Deeds of _____
County, Pennsylvania, and shall constitute a covenant running with the Property and/or equitable servitude, and shall
be binding on the Landowner, his administrators, executors, assigns, heirs, and any other successors in interests, in
perpetuity.

ATTEST:

WITNESS the following signatures and seals:

(SEAL)

For the Municipality:

For the Landowner:

ATTEST:

_____ (City, Borough, Township)

County of _____, Pennsylvania

I, _____, a Notary Public in and for the county and state aforesaid, whose commission
expires on the _____ day of _____, 20____, do hereby certify that _____
whose name(s) is/are signed to the foregoing Agreement bearing date of the _____ day _____,
20____, has acknowledged the same before me in my said county and state.

GIVEN UNDER MY HAND THIS _____ day of _____, 20____.

NOTARY PUBLIC

(SEAL)

MS4 STORMWATER MANAGEMENT ORDINANCE

ORDINANCE NO. _____

MUNICIPALITY OF

_____ COUNTY, PENNSYLVANIA

Adopted at a Public Meeting Held on

_____, 20____

Article I - General Provisions

- Section 101. Short Title
- Section 102. Statement of Findings
- Section 103. Purpose
- Section 104. Statutory Authority
- Section 105. Applicability
- Section 106. Repealer
- Section 107. Severability
- Section 108. Compatibility with Other Requirements
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Article II - Definitions

Article III - Stormwater Management Standards

- Section 301. General Requirements
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- Section 303. Volume Controls
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Article IV - Stormwater Management Site Plan Requirements

- Section 401. Plan Requirements
- Section 402. Plan Submission
- Section 403. Plan Review
- Section 404. Modification of Plans
- Section 405. Resubmission of Disapproved Stormwater Management Site Plans
- Section 406. Authorization to Construct and Term of Validity
- Section 407. As-Built Plans, Completion Certificate and Final Inspection

Article V - Operation and Maintenance

- Section 501. Responsibilities of Developers and Landowners
- Section 502. Operation and Maintenance Agreements

Article VI - Fees and Expenses

- Section 601. General

Article VII - Prohibitions

- Section 701. Prohibited Discharges and Connections
- Section 702. Roof Drains and Sump Pumps
- Section 703. Alteration of SWM BMPs

Article VIII - Enforcement and Penalties

- Section 801. Right-of-Entry
- Section 802. Inspection
- Section 803. Enforcement
- Section 804. Suspension and Revocation
- Section 805. Penalties
- Section 806. Appeals

Article IX - References

Appendix A: Operation and Maintenance Agreement

Appendix B: Worksheets for Computing Expected Pollutant Loads from Specific Land Uses

ARTICLE I - GENERAL PROVISIONS

Section 101. Short Title

This Ordinance shall be known and may be cited as the “(Name of municipality and name of watershed plan, if applicable) MS4 Stormwater Management Ordinance.”

Section 102. Statement of Findings

The governing body of the municipality finds that:

- A. Inadequate management of accelerated runoff of stormwater resulting from development throughout a watershed increases flows and velocities, contributes to erosion and sedimentation, overtaxes the carrying capacity of streams and storm sewers, greatly increases the cost of public facilities to carry and control stormwater, undermines flood plain management and flood control efforts in downstream communities, reduces groundwater recharge, threatens public health and safety, and increases nonpoint source pollution of water resources.
- B. A comprehensive program of stormwater management, including reasonable regulation of development and activities causing accelerated runoff, is fundamental to the public health, safety, and welfare and the protection of people of the Commonwealth, their resources, and the environment.
- C. Stormwater is an important water resource, which provides groundwater recharge for water supplies and base flow of streams, which also protects and maintains surface water quality.
- D. Federal and state regulations require certain municipalities to implement a program of stormwater controls. These municipalities are required to obtain a permit for stormwater discharges from their separate storm sewer systems under the National Pollutant Discharge Elimination System (NPDES).

Section 103. Purpose

The purpose of this Ordinance is to promote health, safety, and welfare within the municipality and its watershed by minimizing the harms and maximizing the benefits described in Section 102 of this Ordinance, through provisions designed to:

- A. Meet legal water quality requirements under state law, including regulations at 25 Pa. Code 93 to protect, maintain, reclaim, and restore the existing and designated uses of the waters of this Commonwealth.
- B. Preserve the natural drainage systems as much as possible.
- C. Manage stormwater runoff close to the source.
- D. Provide procedures and performance standards for stormwater planning and management.

- E. Maintain groundwater recharge to prevent degradation of surface and groundwater quality and to otherwise protect water resources.
- F. Prevent scour and erosion of stream banks and streambeds.
- G. Provide proper operation and maintenance of all SWM BMPs that are implemented within the municipality.
- H. Provide standards to meet NPDES permit requirements.

Section 104. Statutory Authority

The municipality also is empowered to regulate land use activities that affect runoff by the authority of the Act of July 31, 1968, P.L. 805, No. 247, The Pennsylvania Municipalities Planning Code, as amended.

Section 105. Applicability

All regulated activities and all activities that may affect stormwater runoff, including land development and earth disturbance activity, are subject to regulation by this Ordinance.

Section 106. Repealer

Any other ordinance provision(s) or regulation of the municipality inconsistent with any of the provisions of this Ordinance is hereby repealed to the extent of the inconsistency only.

Section 107. Severability

In the event that a court of competent jurisdiction declares any section or provision of this Ordinance invalid, such decision shall not affect the validity of any of the remaining provisions of this Ordinance.

Section 108. Compatibility with Other Requirements

Approvals issued and actions taken under this Ordinance do not relieve the applicant of the responsibility to secure required permits or approvals for activities regulated by any other code, law, regulation, or ordinance.

Section 109. Erroneous Permit

Any permit or authorization issued or approved based on false, misleading or erroneous information provided by an applicant is void without the necessity of any proceedings for revocation. Any work undertaken or use established pursuant to such permit or other authorization is unlawful. No action may be taken by a board, agency or employee of the Municipality purporting to validate such a violation.

ARTICLE II – DEFINITIONS

For the purposes of this Ordinance, certain terms and words used herein shall be interpreted as follows:

- A. Words used in the present tense include the future tense; the singular number includes the plural, and the plural number includes the singular; words of masculine gender include feminine gender; and words of feminine gender include masculine gender.
- B. The word “includes” or “including” shall not limit the term to the specific example but is intended to extend its meaning to all other instances of like kind and character.
- C. The words “shall” and “must” are mandatory; the words “may” and “should” are permissive.

Agricultural Activity – Activities associated with agriculture such as agricultural cultivation, agricultural operation, and animal heavy use areas. This includes the work of producing crops including tillage, land clearing, plowing, disking, harrowing, planting, harvesting crops or pasturing and raising of livestock and installation of conservation measures. Construction of new buildings or impervious area is not considered an agricultural activity.

Applicant – A landowner, developer, or other person who has filed an application to the municipality for approval to engage in any regulated activity at a project site in the municipality.

Best Management Practice (BMP) – Activities, facilities, designs, measures, or procedures used to manage stormwater impacts from regulated activities, to meet state water quality requirements, to promote groundwater recharge, and to otherwise meet the purposes of this Ordinance. Stormwater BMPs are commonly grouped into one of two broad categories or measures: “structural” or “nonstructural.” In this Ordinance, nonstructural BMPs or measures refer to operational and/or behavior-related practices that attempt to minimize the contact of pollutants with stormwater runoff whereas structural BMPs or measures are those that consist of a physical device or practice that is installed to capture and treat stormwater runoff. Structural BMPs include, but are not limited to, a wide variety of practices and devices, from large-scale retention ponds and constructed wetlands, to small-scale underground treatment systems, infiltration facilities, filter strips, low impact design, bioretention, wet ponds, permeable paving, grassed swales, riparian or forested buffers, sand filters, detention basins, and manufactured devices. Structural stormwater BMPs are permanent appurtenances to the project site.

Conservation District – A conservation district, as defined in Section 3(c) of the Conservation District Law (3 P. S. § 851(c)) that has the authority under a delegation agreement executed with DEP to administer and enforce all or a portion of the regulations promulgated under 25 Pa. Code 102.

Design Storm – The magnitude and temporal distribution of precipitation from a storm event measured in probability of occurrence (e.g., a 5-year storm) and duration (e.g., 24 hours) used in the design and evaluation of stormwater management systems. Also see Return Period.

Detention Volume – The volume of runoff that is captured and released into the waters of this Commonwealth at a controlled rate.

DEP – The Pennsylvania Department of Environmental Protection.

Development Site (Site) – See Project Site.

Disturbed Area – An unstabilized land area where an earth disturbance activity is occurring or has occurred.

Earth Disturbance Activity – A construction or other human activity which disturbs the surface of the land, including, but not limited to: clearing and grubbing; grading; excavations; embankments; road maintenance; building construction; and the moving, depositing, stockpiling, or storing of soil, rock, or earth materials.

Erosion – The natural process by which the surface of the land is worn away by water, wind, or chemical action.

Existing Condition – The dominant land cover during the 5-year period immediately preceding a proposed regulated activity.

FEMA – Federal Emergency Management Agency.

Floodplain – Any land area susceptible to inundation by water from any natural source or delineated by applicable FEMA maps and studies as being a special flood hazard area. Also includes areas that comprise Group 13 Soils, as listed in Appendix A of the Pennsylvania DEP Technical Manual for Sewage Enforcement Officers (as amended or replaced from time to time by DEP).

Floodway – The channel of the watercourse and those portions of the adjoining floodplains that are reasonably required to carry and discharge the 100-year flood. Unless otherwise specified, the boundary of the floodway is as indicated on maps and flood insurance studies provided by FEMA. In an area where no FEMA maps or studies have defined the boundary of the 100-year floodway, it is assumed--absent evidence to the contrary--that the floodway extends from the stream to 50 feet from the top of the bank of the stream.

Forest Management/Timber Operations – Planning and activities necessary for the management of forestland. These include conducting a timber inventory, preparation of forest management plans, silvicultural treatment, cutting budgets, logging road design and construction, timber harvesting, site preparation, and reforestation.

Hydrologic Soil Group (HSG) – Infiltration rates of soils vary widely and are affected by subsurface permeability as well as surface intake rates. Soils are classified into four HSGs (A, B, C, and D) according to their minimum infiltration rate, which is obtained for bare soil after prolonged wetting. The NRCS defines the four groups and provides a list of most of the soils in the United States and their group classification. The soils in the area of the development site may be identified from a soil survey report that can be obtained from local NRCS offices or conservation district offices. Soils become less pervious as the HSG varies from A to D (NRCS^{3,4}).

Impervious Surface (Impervious Area) – A surface that prevents the infiltration of water into the ground. Impervious surfaces (or areas) shall include, but not be limited to: roofs; additional

indoor living spaces, patios, garages, storage sheds and similar structures; and any new streets or sidewalks. Decks, parking areas, and driveway areas are not counted as impervious areas if they do not prevent infiltration.

Karst – A type of topography or landscape characterized by surface depressions, sinkholes, rock pinnacles/uneven bedrock surface, underground drainage, and caves. Karst is formed on carbonate rocks, such as limestone or dolomite.

Land Development (Development) – Inclusive of any or all of the following meanings: (i) the improvement of one lot or two or more contiguous lots, tracts, or parcels of land for any purpose involving (a) a group of two or more buildings or (b) the division or allocation of land or space between or among two or more existing or prospective occupants by means of, or for the purpose of streets, common areas, leaseholds, condominiums, building groups, or other features; (ii) any subdivision of land; (iii) development in accordance with Section 503(1.1) of the PA Municipalities Planning Code.

Municipality – (municipality name), (county name) County, Pennsylvania.

NRCS – USDA Natural Resources Conservation Service (previously SCS).

Peak Discharge – The maximum rate of stormwater runoff from a specific storm event.

Pervious Area – Any area not defined as impervious.

Project Site – The specific area of land where any regulated activities in the municipality are planned, conducted, or maintained.

Qualified Professional – Any person licensed by the Pennsylvania Department of State or otherwise qualified by law to perform the work required by this Ordinance.

Regulated Activities – Any earth disturbance activities or any activities that involve the alteration or development of land in a manner that may affect stormwater runoff.

Regulated Earth Disturbance Activity – Activity involving earth disturbance subject to regulation under 25 Pa. Code 92, 25 Pa. Code 102, or the Clean Streams Law.

Retention Volume/Removed Runoff – The volume of runoff that is captured and not released directly into the surface waters of this Commonwealth during or after a storm event.

Return Period – The average interval, in years, within which a storm event of a given magnitude can be expected to occur one time. For example, the 25-year return period rainfall would be expected to occur on average once every 25 years; or stated in another way, the probability of a 25-year storm occurring in any one year is 0.04 (i.e., a 4% chance).

Runoff – Any part of precipitation that flows over the land.

Sediment – Soils or other materials transported by surface water as a product of erosion.

State Water Quality Requirements – The regulatory requirements to protect, maintain, reclaim, and restore water quality under Title 25 of the Pennsylvania Code and the Clean Streams Law.

Stormwater – Drainage runoff from the surface of the land resulting from precipitation or snow or ice melt.

Stormwater Management Facility – Any structure, natural or man-made, that, due to its condition, design, or construction, conveys, stores, or otherwise affects stormwater runoff. Typical stormwater management facilities include, but are not limited to: detention and retention basins; open channels; storm sewers; pipes; and infiltration facilities.

Stormwater Management Best Management Practices – Is abbreviated as **BMPs** or **SWM BMPs** throughout this Ordinance.

Stormwater Management Site Plan – The plan prepared by the developer or his representative indicating how stormwater runoff will be managed at the development site in accordance with this Ordinance. **Stormwater Management Site Plan** will be designated as **SWM Site Plan** throughout this Ordinance.

Subdivision – As defined in The Pennsylvania Municipalities Planning Code, Act of July 31, 1968, P.L. 805, No. 247.

USDA – United States Department of Agriculture.

Waters of this Commonwealth – Any and all rivers, streams, creeks, rivulets, impoundments, ditches, watercourses, storm sewers, lakes, dammed water, wetlands, ponds, springs, and all other bodies or channels of conveyance of surface and underground water, or parts thereof, whether natural or artificial, within or on the boundaries of this Commonwealth.

Watershed – Region or area drained by a river, watercourse, or other surface water of this Commonwealth.

Wetland – Areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions, including swamps, marshes, bogs, and similar areas.

ARTICLE III – STORMWATER MANAGEMENT STANDARDS

Section 301. General Requirements

- A. For all regulated activities, unless preparation of an SWM Site Plan is specifically exempted in Section 302:
 - 1. Preparation and implementation of an approved SWM Site Plan is required.
 - 2. No regulated activities shall commence until the municipality issues written approval of an SWM Site Plan, which demonstrates compliance with the requirements of this Ordinance.
- B. SWM Site Plans approved by the municipality, in accordance with Section 406, shall be on site throughout the duration of the regulated activity.
- C. The municipality may, after consultation with DEP, approve measures for meeting the state water quality requirements other than those in this Ordinance, provided that they meet the minimum requirements of, and do not conflict with, state law including, but not limited to, the Clean Streams Law.
- D. For all regulated earth disturbance activities, erosion and sediment control BMPs shall be designed, implemented, operated, and maintained during the regulated earth disturbance activities (e.g., during construction) to meet the purposes and requirements of this Ordinance and to meet all requirements under Title 25 of the Pennsylvania Code and the Clean Streams Law. Various BMPs and their design standards are listed in the *Erosion and Sediment Pollution Control Program Manual (E&S Manual)*², No. 363-2134-008 (April 15, 2000), as amended and updated.
- E. Impervious areas:
 - 1. The measurement of impervious areas shall include all of the impervious areas in the total proposed development even if development is to take place in stages.
 - 2. For development taking place in stages, the entire development plan must be used in determining conformance with this Ordinance.
 - 3. For projects that add impervious area to a parcel, the total impervious area on the parcel is subject to the requirements of this Ordinance; except that the volume controls in Section 303 and the peak rate controls of Section 304 do not need to be retrofitted to existing impervious areas that are not being altered by the proposed regulated activity.
- F. Stormwater flows onto adjacent property shall not be created, increased, decreased, relocated, or otherwise altered without written notification of the adjacent property owner(s) by the developer. Such stormwater flows shall be subject to the requirements of this Ordinance.

- G. All regulated activities shall include such measures as necessary to:
1. Protect health, safety, and property;
 2. Meet the water quality goals of this Ordinance by implementing measures to:
 - a. Minimize disturbance to floodplains, wetlands, and wooded areas.
 - b. Maintain or extend riparian buffers.
 - c. Avoid erosive flow conditions in natural flow pathways.
 - d. Minimize thermal impacts to waters of this Commonwealth.
 - e. Disconnect impervious surfaces by directing runoff to pervious areas, wherever possible.
 3. To the maximum extent practicable, incorporate the techniques for Low Impact Development Practices described in the *Pennsylvania Stormwater Best Management Practices Manual* (BMP Manual)¹.
- H. The design of all facilities over karst shall include an evaluation of measures to minimize adverse effects.
- I. Infiltration BMPs should be spread out, made as shallow as practicable, and located to maximize use of natural on-site infiltration features while still meeting the other requirements of this Ordinance.
- J. Normally dry, open top, storage facilities should completely drain both the volume control and rate control capacities over a period of time not less than 24 and not more than 72 hours from the end of the design storm.
- K. The design storm volumes to be used in the analysis of peak rates of discharge should be obtained from the Precipitation-Frequency Atlas of the United States, Atlas 14, Volume 2, Version 3.0, U.S. Department of Commerce, National Oceanic and Atmospheric Administration (NOAA), National Weather Service, Hydrometeorological Design Studies Center, Silver Spring, Maryland. NOAA's Atlas 14⁵ can be accessed at: <http://hdsc.nws.noaa.gov/hdsc/pfds/>.
- L. For all regulated activities, SWM BMPs shall be designed, implemented, operated, and maintained to meet the purposes and requirements of this Ordinance and to meet all requirements under Title 25 of the Pennsylvania Code, the Clean Streams Law, and the Storm Water Management Act.
- M. Various BMPs and their design standards are listed in the BMP Manual¹.

Section 302. Exemptions

- A. Regulated activities that result in cumulative earth disturbances less than [one acre maximum] are exempt from the requirements in Section 303, Section 304, and Article IV of this ordinance.
- B. Agricultural activity is exempt from the SWM Site Plan preparation requirements of this Ordinance provided the activities are performed according to the requirements of 25 Pa. Code 102.
- C. Forest management and timber operations are exempt from the SWM Site Plan preparation requirements of this Ordinance provided the activities are performed according to the requirements of 25 Pa. Code 102.
- D. Exemptions from any provisions of this Ordinance shall not relieve the applicant from the requirements in Sections 301.D. through K.
- E. The Municipality may deny or revoke any exemption pursuant to this Section at any time for any project that the Municipality believes may pose a threat to public health and safety or the environment.

Section 303. Volume Controls

The low impact development practices provided in the BMP Manual¹ shall be utilized for all regulated activities to the maximum extent practicable. Water volume controls shall be implemented using the *Design Storm Method* in Subsection A or the *Simplified Method* in Subsection B below. For regulated activity areas equal or less than 1 acre that do not require hydrologic routing to design the stormwater facilities, this Ordinance establishes no preference for either methodology; therefore, the applicant may select either methodology on the basis of economic considerations, the intrinsic limitations on applicability of the analytical procedures associated with each methodology, and other factors.

- A. The *Design Storm Method* (CG-1 in the BMP Manual¹) is applicable to any size of regulated activity. This method requires detailed modeling based on site conditions.
 - 1. Do not increase the postdevelopment total runoff volume for all storms equal to or less than the 2-year 24-hour duration precipitation.
 - 2. For modeling purposes:
 - a. Existing (predevelopment) nonforested pervious areas must be considered meadow in good condition.
 - b. 20% of existing impervious area, when present, shall be considered meadow in good condition in the model for existing conditions.

- B. The *Simplified Method* (CG-2 in the BMP Manual¹) provided below is independent of site conditions and should be used if the *Design Storm Method* is not followed. This method is not applicable to regulated activities greater than 1 acre or for projects that require design of stormwater storage facilities. For new impervious surfaces:
1. Stormwater facilities shall capture at least the first 2 inches of runoff from all new impervious surfaces.
 2. At least the first 1 inch of runoff from new impervious surfaces shall be permanently removed from the runoff flow--i.e., it shall not be released into the surface waters of this Commonwealth. Removal options include reuse, evaporation, transpiration, and infiltration.
 3. Wherever possible, infiltration facilities should be designed to accommodate infiltration of the entire permanently removed runoff; however, in all cases at least the first 0.5 inch of the permanently removed runoff should be infiltrated.
 4. This method is exempt from the requirements of Section 304, Rate Controls.

Section 304. Rate Controls

- A. Areas not covered by a release rate map from an approved Act 167 Stormwater Management Plan:
- Postdevelopment discharge rates shall not exceed the predevelopment discharge rates for the 1-, 2-, 5-, 10-, 25-, 50-, and 100-year 24-hour storms. If it is shown that the peak rates of discharge indicated by the postdevelopment analysis are less than or equal to the peak rates of discharge indicated by the predevelopment analysis for 1-, 2-, 5-, 10-, 25-, 50-, and 100-year, 24-hour storms, then the requirements of this section have been met. Otherwise, the applicant shall provide additional controls as necessary to satisfy the peak rate of discharge requirement.
- B. Areas covered by a release rate map from an approved Act 167 Stormwater Management Plan:
- For the 1-, 2-, 5-, 10-, 25-, 50-, and 100-year storms, the postdevelopment peak discharge rates will follow the applicable approved release rate maps. For any areas not shown on the release rate maps, the postdevelopment discharge rates shall not exceed the predevelopment discharge rates.

ARTICLE IV - STORMWATER MANAGEMENT (SWM) SITE PLAN REQUIREMENTS

Section 401. Plan Requirements

The following items shall be included in the SWM Site Plan:

- A. Appropriate sections from the municipal's Subdivision and Land Development Ordinance, and other applicable local ordinances, shall be followed in preparing the SWM Site Plans. In instances where the municipality lacks Subdivision and Land Development regulations, the content of SWM Site Plans shall follow the county's Subdivision and Land Development Ordinance.
- B. The municipality shall not approve any SWM Site Plan that is deficient in meeting the requirements of this Ordinance. At its sole discretion and in accordance with this Article, when a SWM Site Plan is found to be deficient, the municipality may either disapprove the submission and require a resubmission, or in the case of minor deficiencies, the municipality may accept submission of modifications.
- C. Provisions for permanent access or maintenance easements for all physical SWM BMPs, such as ponds and infiltration structures, as necessary to implement the Operation and Maintenance (O&M) Plan discussed in Item E.9 below.
- D. The following signature block for the municipality:

“(Municipal official or designee), on this date (date of signature), has reviewed and hereby certifies that the SWM Site Plan meets all design standards and criteria of the Municipal Ordinance No. (number assigned to the Ordinance).”
- E. The SWM Site Plan shall provide the following information:
 - 1. The overall stormwater management concept for the project.
 - 2. A determination of site conditions in accordance with the BMP Manual¹. A detailed site evaluation shall be completed for projects proposed in areas of carbonate geology or karst topography, and other environmentally sensitive areas, such as brownfields.
 - 3. Stormwater runoff design computations, and documentation as specified in this Ordinance, or as otherwise necessary to demonstrate that the maximum practicable measures have been taken to meet the requirements of this Ordinance, including the recommendations and general requirements in Section 301.
 - 4. Expected project time schedule.
 - 5. A soil erosion and sediment control plan, where applicable, as prepared for and submitted to the approval authority.
 - 6. The effect of the project (in terms of runoff volumes, water quality, and peak flows) on surrounding properties and aquatic features and on any existing stormwater conveyance system that may be affected by the project.

7. Plan and profile drawings of all SWM BMPs, including drainage structures, pipes, open channels, and swales.
8. SWM Site Plan shall show the locations of existing and proposed on-lot wastewater facilities and water supply wells.
9. The SWM Site Plan shall include an O&M Plan for all existing and proposed physical stormwater management facilities. This plan shall address long-term ownership and responsibilities for O&M as well as schedules and costs for O&M activities.

Section 402. Plan Submission

- A. (Typically 5) copies of the SWM Site Plan shall be submitted as follows:
 1. (Typically 2) copies to the municipality.
 2. (Typically 1) copy to the municipal engineer (when applicable).
 3. (Typically 1) copy to the County Conservation District.
 4. (Typically 1) copy to the County Planning Commission/Office.
- B. Additional copies shall be submitted as requested by the municipality or DEP.

Section 403. Plan Review

- A. SWM Site Plans shall be reviewed by the municipality for consistency with the provisions of this Ordinance.
- B. The municipality shall notify the applicant in writing within 45 days whether the SWM Site Plan is approved or disapproved. If the SWM Site Plan involves a Subdivision and Land Development Plan, the notification shall occur within the time period allowed by the Municipalities Planning Code (90 days). If a longer notification period is provided by other statute, regulation, or ordinance, the applicant will be so notified by the municipality.
- C. If the municipality disapproves the SWM Site Plan, the municipality will state the reasons for the disapproval in writing. The municipality also may approve the SWM Site Plan with conditions and, if so, shall provide the acceptable conditions for approval in writing.

Section 404. Modification of Plans

A modification to a submitted SWM Site Plan that involves a change in SWM BMPs or techniques, or that involves the relocation or redesign of SWM BMPs, or that is necessary because soil or other conditions are not as stated on the SWM Site Plan as determined by the municipality shall require a resubmission of the modified SWM Site Plan in accordance with this Article.

Section 405. Resubmission of Disapproved SWM Site Plans

A disapproved SWM Site Plan may be resubmitted, with the revisions addressing the municipality's concerns, to the municipality in accordance with this Article. The applicable review fee must accompany a resubmission of a disapproved SWM Site Plan.

Section 406. Authorization to Construct and Term of Validity

The municipality's approval of an SWM Site Plan authorizes the regulated activities contained in the SWM Site Plan for a maximum term of validity of 5 years following the date of approval. The municipality may specify a term of validity shorter than 5 years in the approval for any specific SWM Site Plan. Terms of validity shall commence on the date the municipality signs the approval for an SWM Site Plan. If an approved SWM Site Plan is not completed according to Section 407 within the term of validity, then the municipality may consider the SWM Site Plan disapproved and may revoke any and all permits. SWM Site Plans that are considered disapproved by the municipality shall be resubmitted in accordance with Section 405 of this Ordinance.

Section 407. As-Built Plans, Completion Certificate, and Final Inspection

- A. The developer shall be responsible for providing as-built plans of all SWM BMPs included in the approved SWM Site Plan. The as-built plans and an explanation of any discrepancies with the construction plans shall be submitted to the municipality.
- B. The as-built submission shall include a certification of completion signed by a qualified professional verifying that all permanent SWM BMPs have been constructed according to the approved plans and specifications. If any licensed qualified professionals contributed to the construction plans, then a licensed qualified professional must sign the completion certificate.
- C. After receipt of the completion certification by the municipality, the municipality may conduct a final inspection.

ARTICLE V - OPERATION AND MAINTENANCE

Section 501. Responsibilities of Developers and Landowners

- A. The municipality shall make the final determination on the continuing maintenance responsibilities prior to final approval of the SWM Site Plan. The municipality may require a dedication of such facilities as part of the requirements for approval of the SWM Site Plan. Such a requirement is not an indication that the municipality will accept the facilities. The municipality reserves the right to accept or reject the ownership and operating responsibility for any portion of the stormwater management controls.
- B. Facilities, areas, or structures used as Stormwater Management BMPs shall be enumerated as permanent real estate appurtenances and recorded as deed restrictions or conservation easements that run with the land.
- C. The O&M Plan shall be recorded as a restrictive deed covenant that runs with the land.
- D. The municipality may take enforcement actions against an owner for any failure to satisfy the provisions of this Article.

Section 502. Operation and Maintenance Agreements

- A. Prior to final approval of the SWM Site Plan, the property owner shall sign and record an Operation and Maintenance (O&M) Agreement (see Appendix A) covering all stormwater control facilities which are to be privately owned.
 - 1. The owner, successor and assigns shall maintain all facilities in accordance with the approved maintenance schedule in the O&M Plan.
 - 2. The owner shall convey to the Municipality conservation easements to assure access for periodic inspections by the Municipality and maintenance, as necessary.
 - 3. The owner shall keep on file with the Municipality the name, address, and telephone number of the person or company responsible for maintenance activities; in the event of a change, new information shall be submitted by the owner to the Municipality within ten (10) working days of the change.
- B. The owner is responsible for operation and maintenance (O&M) of the SWM BMPs. If the owner fails to adhere to the O&M Agreement, the municipality may perform the services required and charge the owner appropriate fees. Nonpayment of fees may result in a lien against the property.

Section 503. Performance Guarantee

For SWM Site Plans that involve subdivision and land development, the applicant shall provide a financial guarantee to the Municipality for the timely installation and proper construction of all stormwater management controls as required by the approved SWM Site Plan and this Ordinance in accordance with the provisions of Sections 509, 510, and 511 of the Pennsylvania Municipalities Planning Code.

ARTICLE VI - FEES AND EXPENSES

Section 601. General

The municipality may include all costs incurred in the review fee charged to an applicant.

The review fee may include, but not be limited to, costs for the following:

- A. Administrative/clerical processing.
- B. Review of the SWM Site Plan.
- C. Attendance at meetings.
- D. Inspections.

ARTICLE VII - PROHIBITIONS

Section 701. Prohibited Discharges and Connections

- A. Any drain or conveyance, whether on the surface or subsurface, that allows any non-stormwater discharge including sewage, process wastewater, and wash water to enter a regulated small MS4 or to enter the waters of this Commonwealth is prohibited.
- B. No person shall allow, or cause to allow, discharges into a regulated small MS4, or discharges into waters of this Commonwealth, which are not composed entirely of stormwater, except (1) as provided in Subsection C below and (2) discharges allowed under a state or federal permit.
- C. The following discharges are authorized unless they are determined to be significant contributors to pollution a regulated small MS4 or to the waters of this Commonwealth:

- Discharges from firefighting activities	- Flows from riparian habitats and wetlands
- Potable water sources including water line flushing	- Uncontaminated water from foundations or from footing drains
- Irrigation drainage	- Lawn watering
- Air conditioning condensate	- Dechlorinated swimming pool discharges
- Springs	- Uncontaminated groundwater
- Water from crawl space pumps	- Water from individual residential car washing
- Pavement wash waters where spills or leaks of toxic or hazardous materials have not occurred (unless all spill material has been removed) and where detergents are not used	- Routine external building wash down (which does not use detergents or other compounds)
Diverted stream flows	

- D. In the event that the municipality or DEP determines that any of the discharges identified in Subsection C significantly contribute pollutants to a regulated small MS4 or to the waters of this Commonwealth, the municipality or DEP will notify the responsible person(s) to cease the discharge.

Section 702. Roof Drains and Sump Pumps

Roof drains and sump pumps shall discharge to infiltration or vegetative BMPs.

Section 703. Alteration of SWM BMPs

No person shall modify, remove, fill, landscape, or alter any SWM BMPs, facilities, areas, or structures without the written approval of the municipality.

ARTICLE VIII - ENFORCEMENT AND PENALTIES

Section 801. Right-of-Entry

Upon presentation of proper credentials, the municipality may enter at reasonable times upon any property within the municipality to inspect the condition of the stormwater structures and facilities in regard to any aspect regulated by this Ordinance.

Section 802. Inspection

SWM BMPs should be inspected by the landowner, or the owner's designee (including the municipality for dedicated and owned facilities), according to the following list of minimum frequencies:

1. Annually for the first 5 years.
2. Once every 3 years thereafter.
3. During or immediately after the cessation of a 10-year or greater storm.

Section 803. Enforcement

- A. It shall be unlawful for a person to undertake any regulated activity except as provided in an approved SWM Site Plan, unless specifically exempted in Section 302.
- B. It shall be unlawful to violate Section 703 of this Ordinance.
- C. Inspections regarding compliance with the SWM Site Plan are a responsibility of the municipality.

Section 804. Suspension and Revocation

- A. Any approval or permit issued by the municipality pursuant to this Ordinance may be suspended or revoked for:
 1. Non-compliance with or failure to implement any provision of the approved SWM Site Plan or O&M Agreement.
 2. A violation of any provision of this Ordinance or any other applicable law, ordinance, rule, or regulation relating to the Regulated Activity.
 3. The creation of any condition or the commission of any act during the Regulated Activity which constitutes or creates a hazard, nuisance, pollution, or endangers the life or property of others.
- B. A suspended approval may be reinstated by the municipality when:
 1. The municipality has inspected and approved the corrections to the violations that caused the suspension.

2. The municipality is satisfied that the violation has been corrected.
- C. An approval that has been revoked by the municipality cannot be reinstated. The applicant may apply for a new approval under the provisions of this Ordinance.
- D. If a violation causes no immediate danger to life, public health, or property, at its sole discretion, the municipality may provide a limited time period for the owner to correct the violation. In these cases, the municipality will provide the owner, or the owner's designee, with a written notice of the violation and the time period allowed for the owner to correct the violation. If the owner does not correct the violation within the allowed time period, the municipality may revoke or suspend any, or all, applicable approvals and permits pertaining to any provision of this Ordinance.

Section 805. Penalties

[Municipalities should ask their solicitors to provide appropriate wording for this section.]

- A. Anyone violating the provisions of this Ordinance shall be guilty of a summary offense, and upon conviction, shall be subject to a fine of not more than \$ _____ for each violation, recoverable with costs. Each day that the violation continues shall be a separate offense and penalties shall be cumulative.
- B. In addition, the municipality may institute injunctive, mandamus, or any other appropriate action or proceeding at law or in equity for the enforcement of this Ordinance. Any court of competent jurisdiction shall have the right to issue restraining orders, temporary or permanent injunctions, mandamus, or other appropriate forms of remedy or relief.

Section 806. Appeals

- A. Any person aggrieved by any action of the municipality or its designee, relevant to the provisions of this Ordinance, may appeal to the municipality within 30 days of that action.
- B. Any person aggrieved by any decision of the municipality, relevant to the provisions of this Ordinance, may appeal to the County Court of Common Pleas in the county where the activity has taken place within 30 days of the municipality's decision.

ARTICLE IX - REFERENCES

1. Pennsylvania Department of Environmental Protection. No. 363-0300-002 (December 2006), as amended and updated. *Pennsylvania Stormwater Best Management Practices Manual*. Harrisburg, PA.
2. Pennsylvania Department of Environmental Protection. No. 363-2134-008 (April 15, 2000), as amended and updated. *Erosion and Sediment Pollution Control Program Manual*. Harrisburg, PA.
3. U.S. Department of Agriculture, National Resources Conservation Service (NRCS). *National Engineering Handbook*. Part 630: Hydrology, 1969-2001. Originally published as the *National Engineering Handbook*, Section 4: Hydrology. Available from the NRCS online at: <http://www.nrcs.usda.gov/>.
4. U.S. Department of Agriculture, Natural Resources Conservation Service. 1986. *Technical Release 55: Urban Hydrology for Small Watersheds*, 2nd Edition. Washington, D.C.
5. U.S. Department of Commerce, National Oceanic and Atmospheric Administration, National Weather Service, Hydrometeorological Design Studies Center. 2004-2006. *Precipitation-Frequency Atlas of the United States, Atlas 14, Volume 2, Version 3.0*, Silver Spring, Maryland. Internet address: <http://hdsc.nws.noaa.gov/hdsc/pfds/>.

(Ordinance Name)

(Ordinance Number)

ENACTED and **ORDAINED** at a regular meeting of the

on this _____ day of _____, 20____.

This Ordinance shall take effect immediately.

(Name)

(Title)

(Name)

(Title)

(Name)

(Title)

ATTEST:

Secretary

APPENDIX A

**OPERATION AND MAINTENANCE (O&M) AGREEMENT
STORMWATER MANAGEMENT BEST MANAGEMENT PRACTICES (SWM BMPs)**

THIS AGREEMENT, made and entered into this _____ day of _____, 20____, by and between _____, (hereinafter the "Landowner"), and _____ County, Pennsylvania, (hereinafter "Municipality");

WITNESSETH

WHEREAS, the Landowner is the owner of certain real property as recorded by deed in the land records of _____ County, Pennsylvania, Deed Book _____ at page _____, (hereinafter "Property").

WHEREAS, the Landowner is proceeding to build and develop the Property; and

WHEREAS, the SWM BMP Operation and Maintenance (O&M) Plan approved by the Municipality (hereinafter referred to as the "O&M Plan") for the property identified herein, which is attached hereto as Appendix A and made part hereof, as approved by the Municipality, provides for management of stormwater within the confines of the Property through the use of BMPs; and

WHEREAS, the Municipality, and the Landowner, his successors and assigns, agree that the health, safety, and welfare of the residents of the Municipality and the protection and maintenance of water quality require that on-site SWM BMPs be constructed and maintained on the Property; and

WHEREAS, the Municipality requires, through the implementation of the SWM Site Plan, that SWM BMPs as required by said SWM Site Plan and the Municipal Stormwater Management Ordinance be constructed and adequately operated and maintained by the Landowner, successors, and assigns.

NOW, THEREFORE, in consideration of the foregoing promises, the mutual covenants contained herein, and the following terms and conditions, the parties hereto agree as follows:

1. The Landowner shall construct the BMPs in accordance with the plans and specifications identified in the SWM Site Plan.
2. The Landowner shall operate and maintain the BMPs as shown on the SWM Plan in good working order in accordance with the specific operation and maintenance requirements noted on the approved O&M Plan.
3. The Landowner hereby grants permission to the Municipality, its authorized agents and employees, to enter upon the property, at reasonable times and upon presentation of proper credentials, to inspect the BMPs whenever necessary. Whenever possible, the Municipality shall notify the Landowner prior to entering the property.
4. In the event the Landowner fails to operate and maintain the BMPs per paragraph 2, the Municipality or its representatives may enter upon the Property and take whatever action is deemed necessary to maintain said BMP(s). It is expressly understood and agreed that the Municipality is under no obligation to maintain or repair said facilities, and in no event shall this Agreement be construed to impose any such obligation on the Municipality.
5. In the event the Municipality, pursuant to this Agreement, performs work of any nature, or expends any funds in performance of said work for labor, use of equipment, supplies, materials, and the like, the Landowner shall reimburse the Municipality for all expenses (direct and indirect) incurred within 10 days of receipt of invoice from the Municipality.

6. The intent and purpose of this Agreement is to ensure the proper maintenance of the onsite BMPs by the Landowner; provided, however, that this Agreement shall not be deemed to create or effect any additional liability of any party for damage alleged to result from or be caused by stormwater runoff.
7. The Landowner, its executors, administrators, assigns, and other successors in interests, shall release the Municipality from all damages, accidents, casualties, occurrences, or claims which might arise or be asserted against said employees and representatives from the construction, presence, existence, or maintenance of the BMP(s) by the Landowner or Municipality.
8. The Municipality intends to inspect the BMPs at a minimum of once every three years to ensure their continued functioning.

This Agreement shall be recorded at the Office of the Recorder of Deeds of _____
County, Pennsylvania, and shall constitute a covenant running with the Property and/or equitable servitude, and shall
be binding on the Landowner, his administrators, executors, assigns, heirs, and any other successors in interests, in
perpetuity.

ATTEST:

WITNESS the following signatures and seals:

(SEAL)

For the Municipality:

For the Landowner:

ATTEST:

_____ (City, Borough, Township)

County of _____, Pennsylvania

I, _____, a Notary Public in and for the county and state aforesaid, whose commission
expires on the _____ day of _____, 20_____, do hereby certify that _____
whose name(s) is/are signed to the foregoing Agreement bearing date of the _____ day _____,
20_____, has acknowledged the same before me in my said county and state.

GIVEN UNDER MY HAND THIS _____ day of _____, 20_____.

NOTARY PUBLIC

(SEAL)

APPENDIX B

This Appendix contains worksheets 11, 12, and 13 from Chapter 8 of the Pennsylvania Stormwater Best Management Practices Manual (DEP, 2006). These worksheets are useful for computing expected stormwater pollutant loads for common land uses and for computing the resulting loads after the application of the most common stormwater management BMPs.

WORKSHEET 11. BMPs FOR POLLUTION PREVENTION	
<p><i>Does the site design incorporate the following BMPs to address nitrate pollution? A summary "yes" rating is achieved if at least 2 BMPs are provided across the site. "Provided across the site" is taken to mean that the specifications for that BMP set forward in Chapters 5 and 6 are satisfied.</i></p>	
<u>BMPs FOR POLLUTANT PREVENTION:</u>	
	YES NO
NS BMP 5.4.1 - Protect Sensitive / Special Value Features	<input type="checkbox"/> <input type="checkbox"/>
NS BMP 5.4.2 - Protect / Conserve / Enhance Riparian Buffers	<input type="checkbox"/> <input type="checkbox"/>
NS BMP 5.4.3 - Protect / Utilize Natural Flow Pathways in Overall Stormwater Planning and Design	<input type="checkbox"/> <input type="checkbox"/>
NS BMP 5.5.1 - Cluster Uses at Each Site; Build on the Smallest Area Possible	<input type="checkbox"/> <input type="checkbox"/>
NS BMP 5.6.1 - Minimize Total Disturbed Area - Grading	<input type="checkbox"/> <input type="checkbox"/>
NS BMP 5.6.2 - Minimize Soil Compaction in Disturbed Areas	<input type="checkbox"/> <input type="checkbox"/>
NS BMP 5.6.3 - Re-Vegetate / Re-Forest Disturbed Areas (Native Species)	<input type="checkbox"/> <input type="checkbox"/>
NS BMP 5.7.1 - Reduce Street Imperviousness	<input type="checkbox"/> <input type="checkbox"/>
NS BMP 5.7.2 - Reduce Parking Imperviousness	<input type="checkbox"/> <input type="checkbox"/>
NS BMP 5.8.1 - Rooftop Disconnection	<input type="checkbox"/> <input type="checkbox"/>
NS BMP 5.8.2 - Disconnection from Storm Sewers	<input type="checkbox"/> <input type="checkbox"/>
NS BMP 5.9.1 - Street Sweeping	<input type="checkbox"/> <input type="checkbox"/>
Structural BMP 6.7.1 - Riparian Buffer Restoration	<input type="checkbox"/> <input type="checkbox"/>
Structural BMP 6.7.2- Landscape Restoration	<input type="checkbox"/> <input type="checkbox"/>
Structural BMP 6.7.3- Soils Amendment and Restoration	<input type="checkbox"/> <input type="checkbox"/>

WORKSHEET 12. WATER QUALITY ANALYSIS OF POLLUTANT LOADING FROM ALL DISTURBED AREAS

TOTAL SITE AREA (AC)	
TOTAL DISTURBED AREA (AC)	
DISTURBED AREA	
CONTROLLED BY BMPs (AC)	

TOTAL DISTURBED AREAS:

	LAND COVER CLASSIFICATION	POLLUTANT			COVER (Acres)	RUNOFF VOLUME (AF)	POLLUTANT LOAD		
		TSS EMC (mg/l)	TP EMC (mg/l)	Nitrate-Nitrite EMC (mg/l as N)			TSS** (LBS)	TP** (LBS)	NO ₃ (LBS)
Pervious Surfaces	Forest	39	0.15	0.17					
	Meadow	47	0.19	0.3					
	Fertilized Planting Area	55	1.34	0.73					
	Native Planting Area	55	0.40	0.33					
	Lawn, Low-Input	180	0.40	0.44					
	Lawn, High-Input	180	2.22	1.46					
	Golf Course Fairway/Green	305	1.07	1.84					
	Grassed Athletic Field	200	1.07	1.01					
Impervious Surfaces	Rooftop	21	0.13	0.32					
	High Traffic Street / Highway	261	0.40	0.83					
	Medium Traffic Street	113	0.33	0.58					
	Low Traffic / Residential Street	86	0.36	0.47					
	Res. Driveway, Play Courts, etc.	60	0.46	0.47					
	High Traffic Parking Lot	120	0.39	0.60					
	Low Traffic Parking Lot	58	0.15	0.39					
TOTAL LOAD									
REQUIRED REDUCTION (%)							85%	85%	50%
REQUIRED REDUCTION (LBS)									

* Pollutant Load = [EMC, mg/l] X [Volume, AF] X [2.7, Unit Conversion]

** TSS and TP calculations only required for projects not meeting CG1/CG2 or not controlling less than 90% of the disturbed area

WORKSHEET 13. POLLUTANT REDUCTION THROUGH BMP APPLICATIONS*

* FILL THIS WORKSHEET OUT FOR EACH BMP TYPE WITH DIFFERENT POLLUTANT REMOVAL EFFICIENCIES. SUM POLLUTANT REDUCTION ACHIEVED FOR ALL BMP TYPES ON FINAL SHEET.

BMP TYPE: _____

DISTURBED AREA CONTROLLED BY THIS BMP TYPE (AC)	
---	--

DISTURBED AREAS CONTROLLED BY THIS BMP TYPE:

	LAND COVER CLASSIFICATION	POLLUTANT			COVER (Acres)	RUNOFF VOLUME (AF)	POLLUTANT LOAD**		
		TSS EMC (mg/l)	TP EMC (mg/l)	Nitrate-Nitrite EMC (mg/l as N)			TSS*** (LBS)	TP*** (LBS)	NO ₃ (LBS)
Pervious Surfaces	Forest	39	0.15	0.17					
	Meadow	47	0.19	0.3					
	Fertilized Planting Area	55	1.34	0.73					
	Native Planting Area	55	0.40	0.33					
	Lawn, Low-Input	180	0.40	0.44					
	Lawn, High-Input	180	2.22	1.46					
	Golf Course Fairway/Green	305	1.07	1.84					
Grassed Athletic Field	200	1.07	1.01						
Impervious Surfaces	Rooftop	21	0.13	0.32					
	High Traffic Street / Highway	261	0.40	0.83					
	Medium Traffic Street	113	0.33	0.58					
	Low Traffic / Residential Street	86	0.36	0.47					
	Res. Driveway, Play Courts, etc.	60	0.46	0.47					
	High Traffic Parking Lot	120	0.39	0.60					
	Low Traffic Parking Lot	58	0.15	0.39					
TOTAL LOAD TO THIS BMP TYPE									
POLLUTANT REMOVAL EFFICIENCIES FROM TABLE 9-3 (%)									
POLLUTANT REDUCTION ACHIEVED BY THIS BMP TYPE (LBS)									

POLLUTANT REDUCTION ACHIEVED BY ALL BMP TYPES (LBS)
REQUIRED REDUCTION FROM WS12 (LBS)

** Pollutant Load = [EMC, mg/l] X [Volume, AF] X [2.7, Unit Conversion]

*** TSS and TP calculations only required for projects not meeting CG1/CG2 or not controlling less than 90% of the disturbed area



COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF POINT AND NON-POINT SOURCE MANAGEMENT

**GENERAL PERMIT PAG-13
FOR STORMWATER DISCHARGES
FROM SMALL MUNICIPAL SEPARATE STORM SEWER SYSTEMS (MS4s)**

GENERAL PERMIT FACT SHEET AND RATIONALE

EXECUTIVE SUMMARY

A fact sheet shall be prepared in accordance with 40 CFR §124.8(a) for every draft permit for a National Pollutant Discharge Elimination System (NPDES) facility or activity. The fact sheet shall briefly set forth the principal facts and the significant factual, legal, methodological, and policy questions considered in preparing the draft permit.

1. Activities Permitted Under the General Permit (PAG-13)

Dischargers of stormwater from regulated small municipal separate storm sewer systems (small MS4s), as defined in 40 CFR §122.26(b)(16), are required under the federal stormwater regulations (40 CFR Part 122) and state regulations incorporating those federal requirements by reference (25 Pa. Code § 92a.3), to submit an application and obtain a NPDES permit to discharge stormwater into surface waters of the Commonwealth of Pennsylvania.

PAG-13 authorizes stormwater discharges subject to the provisions of the Clean Water Act (CWA), 33 United States Code (U.S.C.) Sections 1251 et seq., Pennsylvania's (PA's) Clean Streams Law (CSL), as amended, 35 P.S. Sections 691.1 et seq., and 25 Pa. Code Chapter 92a.

In Pennsylvania, 938 municipalities were automatically designated as regulated by EPA pursuant to 40 CFR §122.32(a)(1). Five (5) municipalities were manually designated as regulated by the PA Department of Environmental Protection (DEP) under 40 CFR §122.32(a)(2). Of the manually designated municipalities, the City of Butler, City of Meadville, and New Castle City were issued permits; Oil City and the City of Warren were granted waivers.

PAG-13 authorizes discharges from regulated small MS4s to surface waters of the Commonwealth, when such discharges are composed entirely of stormwater as defined in PAG-13. The permittee is required to submit reports to document the implementation of the Stormwater Management Program (SWMP), as set forth in Appendix A, designed to reduce the discharge of pollutants from the regulated small MS4 to the Maximum Extent Practicable (MEP); and when required, the development, submission to DEP for approval, and activity to ensure implementation of an MS4 Total Maximum Daily Load (TMDL) Plan consistent with the TMDL; and when required, progress with the development, submission to DEP for approval, and ensuring implementation of a Chesapeake Bay Pollutant Reduction Plan.

2. Types of Discharges Covered Under PAG-13

This permit covers stormwater discharges from regulated small MS4s.

3. Prevention of Significant Deterioration Permits

PAG-13 is not a Prevention of Significant Deterioration permit.

4. Basis of Permit Conditions Under PAG-13

Stormwater is the surface runoff that results from rain and snow melt. Urban development alters natural hydrologic characteristics of the land and generates a host of pollutants that are associated with the activities of urban populations, thus causing an increase in stormwater runoff volumes and pollutant loadings in stormwater discharged to receiving waterbodies. Urban development increases the amount of impervious surface in a watershed as farmland, forests, meadowlands, and agricultural land uses are converted to other land uses. Land with natural hydrologic characteristics becomes occupied by buildings with rooftops, driveways, sidewalks, roads, and parking lots with virtually no ability to absorb stormwater.

Polluted stormwater runoff often is transported to MS4s and ultimately discharged from those MS4s into local rivers and streams without treatment.

State and Federal NPDES stormwater regulations establish permit requirements for discharges from regulated small MS4s. EPA's Stormwater Phase II Rule requires operators of regulated small MS4s, including municipalities, to develop and implement an MS4 SWMP that is intended to improve the Nation's waterways by reducing the quantity of pollutants that stormwater carries into waterways during storm events.

Common pollutants found in stormwater runoff include oil and grease from roadways, pesticides from lawns, sediment from construction sites, discarded trash, such as cigarette butts, paper wrappers, and plastic bottles, and sediment from waterway erosion. When these kinds of pollutants are carried by stormwater into regulated small MS4s that discharge into nearby waterways, the waterways can become impaired for uses, such as habitat for fish and other aquatic wildlife, drinking water supplies, and water-contact recreational use.

In 1999, EPA promulgated rules to regulate small MS4s. A regulated small MS4 is defined as any part of a small MS4 that is located within an "urbanized area" (UA) as defined by the U.S. Bureau of Census, as well as those MS4s located outside of an UA, but within an area that is designated as regulated by an NPDES permitting authority. [40 CFR § 122.32(a)] Municipal separate storm sewer means a conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man-made channels, or storm drains), owned or operated by a state, city or federal entity, municipality, or other public entity that discharge stormwater into waters of the U.S. The term small MS4 includes other systems similar to separate storm sewer systems operated by local governments such as systems at military bases, large hospital or prison complexes, and highways and other thoroughfares. The term does not include separate storm sewers in very discrete areas, such as individual buildings.

The Federal regulations establish six (6) Minimum Control Measures (MCMs) that must be satisfied by the permittee through implementation of a SWMP consisting of Best Management Practices (BMPs) designed to reduce the discharge of pollutants from the regulated small MS4 to the MEP. Rather than numeric 'end of pipe' limits, the 'narrative' BMPs are designed to reduce the amount of pollutants discharged in stormwater runoff. Permittees meet the regulatory and permit requirements by implementing the BMPs in the permittees' SWMP to the MEP, and demonstrating that such BMPs consistently reduce pollutants in stormwater runoff.

For more details regarding the rationale for requirements of coverage under PAG-13, please refer to Section 10 below.

5. Variances or Alternatives to Required Standards

PAG-13 is consistent with applicable regulatory and statutory requirements.

6. Procedures for Final Decision

Procedural steps in support of a final decision include the following.

- A.** The public comment period for PAG-13 was open from April 4, 2009 through July 6, 2009. Comments received during this period were incorporated into the final revised permit in the most appropriate manner.
- B.** Public hearings were held on June 16, 2009, in Pittsburgh, PA; June 18, 2009, in Norristown, PA; and June 23, 2009, in Harrisburg, PA. Testimony provided at each hearing was incorporated into the final draft permit in the most appropriate manner.
- C.** DEP maintains an open-door policy and staff members have participated in numerous meetings, discussions, conferences, and conversations with various groups and individuals during the multi-year renewal process for PAG-13.
- D.** DEP consulted with EPA Region 3 staff and negotiated final language of this reissued permit.

If modification and reissuance of PAG-13 are required, DEP will publish a notice in the Pennsylvania Bulletin of the availability of the draft modified General Permit (GP). After a comment period specified in the notice of draft permit, a notice of availability of the final modification and reissuance of the GP will be published in the Pennsylvania Bulletin.

7. Contact Information

Information concerning the PAG-13 permit application and the tentative decision is on file and may be inspected by appointment, or copies obtained at a nominal cost, at the DEP Bureau of Point and Non-Point

Source Management, Rachel Carson State Office Building, 400 Market St., Harrisburg, PA 17105, Monday through Friday (except State holidays) between 8:00am and 4:00pm.

Requests for information should be directed to Barry A. Newman at the above address, by phone at (717) 705-6346, or by e-mail at banewman@state.pa.us

8. Provisions to Satisfy the Requirements of 40 CFR 124.56

NPDES MS4 permit PAG-13 is not subject to the requirements of 40 CFR §124.56.

9. Justification for Waiver of Application Requirements

NPDES MS4 permit PAG-13 is not subject to the requirements of 40 CFR §122.21(j) or (q).

10. Rationale of Requirements for Coverage Under PAG-13

The following items provide the rationale for all requirements placed on permittees who meet the eligibility requirements for coverage under PAG-13.

A. According to 40 CFR §122.44(l), the standards and conditions in reissued permits must be at least as stringent as the standards and conditions in the previous permit to avoid backsliding. All currently regulated small MS4s in the State have had more than five (5) years to establish their SWMPs. The prior permit required permittees to implement a SWMP within the permit term. Permittees that have not developed and implemented the requirements are in violation of the permit and are not eligible to apply for the new permit unless they satisfy all compliance requirements before the new permit becomes effective.

B. MEP Rationale

Section 402(p)(3)(B) of the CWA establishes NPDES permit standards for discharges from regulated MS4s. The following information applies to NPDES permits for discharges from MS4s: (1) a permit may be issued on a system or jurisdiction-wide basis, (2) a permit must include a requirement to effectively prohibit non-stormwater discharges into the regulated MS4s, and (3) a permit must require controls to reduce pollutant discharges to the MEP, including BMPs, and other provisions as determined to be appropriate by the Administrator or State for control of such pollutants.

PAG-13 requires permittees to develop a SWMP that is designed to reduce the discharge of pollutants to the MEP. The MEP standard requires the permittee to demonstrate to DEP that the permittee's program of BMPs will be effective in reducing the discharge of pollutants in stormwater runoff and that the permittee will implement the BMPs as soon as practicable. The permittee must use all known, available, and reasonable methods of prevention, control, and treatment of stormwater in a rigorous attempt to comply. MEP requires that permittees choose cost-effective BMPs and reject applicable BMPs only where other effective BMPs will (1) serve the same purpose, (2) not be technically infeasible, or (3) not be cost prohibitive.

C. Six MCMs Rationale

PAG-13 requires that permittees develop, implement, and enforce a SWMP designed to reduce the discharge of pollutants from MS4s to the MEP, to protect Water Quality (WQ), and to satisfy the appropriate WQ requirements of the CWA. Permittees' SWMPs must include the six (6) MCMs. In order to meet eligibility criteria for coverage under PAG-13, permittees must implement the BMPs listed under each MCM.

Public Education and Outreach

In accordance with 40 CFR §122.34(b)(1), permittees must implement a public education program to distribute and/or present educational materials to the community or conduct equivalent outreach activities about the impacts of stormwater discharges on water bodies and the steps that the public can take to reduce the discharge of pollutants in stormwater runoff.

PAG-13 specifies target audiences that must be addressed with a message to reduce or eliminate practices and behaviors that contribute to polluted stormwater runoff. Permittees must fully implement and achieve four (4) BMPs to comply with this MCM.

Public Involvement and Participation

In accordance with 40 CFR §122.34(b)(2), permittees must comply with applicable state and local public notice requirements when implementing a public involvement/participation program. Permittees must fully implement and achieve three (3) BMPs to comply with this MCM, which will require permittees to provide greater opportunity for public participation in municipal regulation of stormwater management.

This MCM requires municipalities to make periodic reports available to the public on websites, at municipal offices, or via US Mail upon request. This is to ensure reasonable public access to information and documents relevant to public involvement and participation in the permittee's SWMP.

Illicit Discharge Detection and Elimination (IDD&E)

In accordance with 40 CFR §122.34(b)(3), permittees must develop, implement, and enforce a program to detect and eliminate illicit discharges into their regulated small MS4s. Permittees must fully implement and achieve the measurable goals established for six (6) BMPs to comply with this MCM and meet the following requirements in accordance with 40 CFR §122.34(b)(3):

- Develop (or update for renewal permittees) a storm sewer system map, showing the location of all outfalls and the names and locations of all surface waters of the Commonwealth that receive discharges from those outfalls;
- To the extent allowable under State or local law, effectively prohibit, through ordinance, or other regulatory mechanism, non-stormwater discharges into regulated small MS4s and implement appropriate enforcement procedures and actions;
- Develop and implement a plan to detect and address non-stormwater discharges, including illegal dumping, to regulated small MS4s; and
- Inform public employees, businesses, and the general public of the hazards associated with illegal discharges and improper disposal of waste.

This MCM includes references to the following guidance published by the EPA on building an IDD&E program: "Illicit Discharge Detection and Elimination: A Guidance Manual for Program Development and Technical Assessments." This manual provides guidance to MS4 operators for their IDD&E program and may be obtained free of charge from EPA at: <http://cfpub.epa.gov/NPDES/stormwater/idde.cfm>

Construction Site Stormwater Runoff Control

DEP implements a state-wide erosion and sediment pollution control program applicable to any earth disturbance activity. In sixty-six of Pennsylvania's sixty-seven counties, a significant portion of this program is delegated by DEP to county conservation districts (CCD) through a written delegation agreement. Under this statewide regulatory program, persons proposing or conducting earth disturbance activities are required to develop and implement an Erosion and Sediment Control Plan ("E&S Plan") containing erosion and sediment ("E&S") control BMPs which minimize the potential for accelerated erosion and sedimentation during construction activities and post construction stormwater management (PCSM) after construction. This DEP statewide regulatory program and its associated E&S control and PCSM BMPs in MCM #4 (Construction Site Stormwater Runoff Control) and MCM #5 (Post Construction Stormwater Management) satisfy the qualifying local program (QLP) requirements established under federal regulation at 40 CFR §122.34(c).

For construction activities involving one acre or more acres of earth disturbance, an NPDES Permit for Stormwater Discharges Associated with Construction Activities is required. That permit also requires implementation of Post Construction Stormwater Management (PCSM) BMPs (see the next section).

DEP's regulations prevent a municipality or county from issuing a building permit, other permit, or final approval, to those proposing or conducting earth disturbance activities, before the required NPDES permit (or approved coverage under a General NPDES Permit) has been issued.

Under the Conservation District Law, DEP may delegate, by written agreement, the administration and enforcement of the Erosion and Sediment Control Program to a CCD if the CCD has adequate and qualified staff to implement the program. In addition, municipalities can develop working agreements with CCDs to implement municipal responsibilities for erosion and sediment control programs, stormwater management programs, or other related activities.

CCDs delegated to implement the NPDES construction stormwater programs receive both permit fees and an annual appropriation to cover the costs of implementing the program. CCDs also can charge fees for the review of plans for construction and post construction stormwater control, as well as other stormwater management plans.

DEP is responsible for implementation of the statewide program for issuing NPDES Permits for Stormwater Discharges Associated with Construction Activities; therefore, permittees may rely on DEP's QLP to satisfy all requirements under this MCM. In the Notice of Intent (NOI) for PAG-13, permittees can indicate whether they will rely on DEP's QLP to satisfy this MCM #4 (and the first three BMPs under MCM #5) or whether they will operate their own program to meet all applicable requirements under this MCM #4 (and MCM #5).

Permittees may rely on DEP's QLP for issuing NPDES Permits for Stormwater Discharges Associated with Construction Activities to meet all requirements under this MCM since the state program fully satisfies the federal regulatory requirements established at 40 CFR §122.34(b)(4) for construction site stormwater runoff control. The state regulations and state permitting program are designed to reduce pollutants in stormwater runoff from all construction sites in Pennsylvania that are greater than or equal to one (1) acre, including projects that are less than one (1) acre when such projects are part of a larger common plan or development or sale that involves one (1) or more acres. The state program is established in state regulations at 25 Pa. Code Chapter 102. The following table lists the regulatory requirements for this MCM and the corresponding components of the state construction stormwater permitting program and regulations that satisfy each requirement.

**Table No. 1
Federal Requirements for Minimum Control Measure #4, Construction Site Stormwater Runoff Control
and Corresponding Regulatory Program Authority**

	Requirements at 40 CFR 122.34(b)(4)(ii)	Pennsylvania Regulation or Permit Requirement
A	Develop and implement an ordinance or other regulatory mechanism to require Erosion and Sediment (E&S) controls, as well as sanctions to ensure compliance, to the extent allowable under State or local law;	<p>25 Pa. Code §102.4 General requirements.</p> <ul style="list-style-type: none"> o All persons conducting earth disturbances are required to implement and maintain BMPs to minimize accelerated erosion and sedimentation. o All persons conducting earth disturbance activities equal to or greater than 5,000 sq. ft. are required to develop a written E&S Plan. <p>25 Pa. Code §102.32 Compliance and enforcement provisions. Compliance and enforcement actions under this chapter which may be pursued include the following:</p> <ul style="list-style-type: none"> o Investigations and inspections. o Response to complaints. o Orders (including orders to remediate or restore). o Civil penalty proceedings, except as provided in subsection (b). o Summary proceedings. o The suspension, revocation, withholding or denial of permits or approvals. o Notices of violation. o Actions in a court of competent jurisdiction, including requests for injunctive relief. o Other administrative, civil, criminal or equitable action authorized by law.
B	Require construction site operators to implement appropriate E&S control BMPs;	25 Pa. Code §102.4. See above.
C	Develop and implement requirements for construction site operators to control waste at the construction site that may cause adverse impacts to water quality (WQ). These wastes can include discarded building materials, concrete truck washout, chemicals, litter, and sanitary waste;	<p>25 Pa.Code §102.4 Erosion and sediment control requirements. The Erosion and Sediment Control Plan must contain procedures which ensure that the proper measures for the recycling or disposal of materials associated with or from the project site will be undertaken in accordance with this title.</p> <p>25 Pa Code § 91.34 Activities utilizing pollutants. Persons engaged in an activity which includes the impoundment, production, processing, transportation, storage, use, application or disposal of pollutants shall take necessary measures to prevent the substances from directly or indirectly reaching waters of this Commonwealth, through accident, carelessness, maliciousness, hazards of weather or from another cause.</p>

D	Develop and implement procedures for site plan review, which incorporate consideration of potential WQ impacts;	25 Pa. Code §102.4. Erosion and sediment control requirements. <ul style="list-style-type: none">o E&S Plans are reviewed when a permit (NPDES, E&S, WOE) is required or as a result of a complaint investigation or inspection.o Earth disturbance activities shall be planned and conducted to minimize the extent and duration of the disturbance.o The Erosion and Sediment Control Plan shall contain the following:<ul style="list-style-type: none">(i) The existing topographic features of the project site and the immediate surrounding area.(ii) The types, depth, slope, locations and limitations of the soils.(iii) The characteristics of the earth disturbance activity, including the past, present and proposed land uses and the proposed alteration to the project site.(iv) The volume and rate of runoff from the project site and its upstream watershed area.(v) The location of all surface waters which may receive runoff within or from the project site and their classification under Chapter 93.(vi) A narrative description of the location and type of perimeter and onsite BMPs used before, during and after the earth disturbance activity.(vii) A sequence of BMP installation and removal in relation to the scheduling of earth disturbance activities, prior to, during and after earth disturbance activities that ensure the proper functioning of all BMPs.(viii) Supporting calculations and measurements.(ix) Plan drawings.(x) A maintenance program which provides for the operation and maintenance of BMPs and the inspection of BMPs on a weekly basis and after each stormwater event, including the repair or replacement of BMPs to ensure effective and efficient operation. The program must provide for completion of a written report documenting each inspection and all BMP repair, or replacement and maintenance activities.(xi) Procedures which ensure that the proper measures for the recycling or disposal of materials associated with or from the project site will be undertaken in accordance with this title.(xii) Identification of the naturally occurring geologic formations or soil conditions that may have the potential to cause pollution during earth disturbance activities and include bmps to avoid or minimize potential pollution and its impacts from the formations.(xiii) <u>Identification of</u> potential thermal impacts to surface waters <u>of this Commonwealth</u> from the earth disturbance activity <u>including</u> BMPs to avoid, minimize or mitigate potential pollution from thermal impacts.
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		<p>(xiv) The E&S plan shall be planned, designed and implemented to be consistent with the PCSM plan under § 102.8 (relating to PCSM requirements). Unless otherwise approved by the DEP, the E & S plan must be separate from the PCSM plan and labeled "E & S" or "erosion and sediment control plan" and be the final plan for construction.</p> <p>(xv) <u>Identification of</u> existing and proposed riparian forest buffers.</p>
E	Develop and implement procedures for receipt and consideration of information submitted by the public; and	<p>25 Pa.Code §92a.82 and §92a.83 Public notice of permit application and public hearing</p> <ul style="list-style-type: none"> o Public notice of every NPDES permit application is published in the <i>Pa Bulletin</i> by the Department. o 30-day period following public notice for receipt of written comments, including the opportunity to submit a request or petition for a public hearing.
F	Development and implement procedures for site inspections and enforcement of control measures.	25 Pa. Code §102.32. See above.

If a permittee is implementing the construction site stormwater runoff control MCM in accordance with 40 CFR §122.34(b)(4), the permittee must develop, implement, and enforce a program to reduce pollutants in any stormwater runoff entering the permittee's regulated small MS4 from construction activities associated with land disturbance of greater than or equal to one (1) acre, including projects that are less than one (1) acre when such projects are part of a larger common plan of development or sale that involves one (1) or more acres. Permittees with their own programs must implement the following measures to satisfy this MCM and comply with the regulatory requirements at 40 CFR §122.34(b)(4):

- Develop, implement, and enforce an ordinance or other regulatory mechanism to require Erosion and Sediment (E&S) controls, as well as sanctions to ensure compliance, to the extent allowable under State or local law;
- Require construction site operators to implement appropriate E&S control BMPs;
- Develop, implement, and enforce requirements for construction site operators to control waste at the construction site that may cause adverse impacts to WQ. These wastes can include discarded building materials, concrete truck washout, chemicals, litter, and sanitary waste;
- Develop and implement procedures for site plan review, which incorporate consideration of potential WQ impacts;
- Develop and implement procedures for receipt and consideration of information submitted by the public; and
- Development and implement procedures for site inspections and enforcement of control measures.

In all cases, municipalities, including counties, may not issue a building or other permit or final approval to anyone proposing to conduct earth disturbance activities until the required NPDES Construction permit (or approved coverage under a General NPDES Permit) has been authorized by DEP or by a delegated county conservation district (CCD).

Municipalities that implement local programs to regulate construction stormwater controls may choose to negotiate an agreement with their CCD for services such as plan reviews, construction inspection, post construction inspections, and training.

Post-Construction Stormwater Management (PCSM) for New Development and Redevelopment

DEP's implementation of Pennsylvania's statewide program for NPDES Permits for Stormwater Discharges Associated with Construction Activities also includes requirements for Post Construction Stormwater Management statewide. Persons proposing or conducting earth disturbance activities are required to develop, submit for approval, and implement a PCSM Plan containing BMPs to manage the net change in stormwater runoff volume, rate and quality. DEP's QLP and its associated BMPs satisfy the first three (3) BMPs under this MCM #5 (Post-Construction Stormwater Management in New Development and Redevelopment) in the federal NPDES Phase II storm water regulations. All permittees using PAG-13 are required to implement the last three (3) BMPs under MCM #5.

DEP is responsible for implementation of the statewide program for issuing NPDES Permits for Stormwater Discharges Associated with Construction Activities. Since this NPDES permitting program requires a PCSM plan to be included with the plan for construction activities, permittees may rely on DEP's QLP to satisfy the first three BMPs under this MCM #5. In the PAG-13 NOI, permittees must indicate whether or not they will rely on DEP's program to satisfy the first three (3) BMPs under this MCM #5 (and all requirements under MCM #4) or whether they will operate their own program to meet all applicable requirements under this MCM #5 (and MCM #4).

Permittees may rely on DEP's state-wide program for issuing NPDES Permits for Stormwater Discharges Associated with Construction Activities to meet the federal regulatory requirements established at 40 CFR §122.34(b)(5) for post-construction storm water management in new development and redevelopment. The state program is established in state regulations at 25 Pa. Code Chapter 102. The state regulations and program are designed to address storm water runoff from all new development and redevelopment projects that disturb greater than or equal to one (1) acre, including projects less than one (1) acre that are part of a larger common plan of development or sale. The state regulations and associated permitting programs ensure that controls are in place to prevent or minimize water quality impacts during and after regulated construction activities. The following table lists the regulatory requirements for this MCM #5 and the corresponding components of the state construction stormwater regulations and permitting program that satisfy each of the requirements.

Table No. 2 Federal Requirements for Minimum Control Measure #5, Post Construction Stormwater Management and Corresponding Pennsylvania Regulatory Program Authority		
A	Develop and implement strategies which include a combination of structural and/or non-structural best management practices;	<p>25 Pa. Code §102.11 Design, implementation and maintenance requirements and design standards for E & S BMPs and PCSM BMPs which minimize the potential for accelerated erosion and sedimentation, and control stormwater volume, rate and water quality are listed in the Department's <i>Manuals</i>.</p>
B	Use an ordinance or other regulatory mechanism to address post-construction runoff from new development and redevelopment projects.	<p>25 Pa. Code Section 93.4a Stormwater management (PCSM) plans are required under the NPDES Stormwater Discharges Associated with Construction Activities permit program. All plans for development and redevelopment activities that disturb 1 acre or more of earth must meet the antidegradation requirements found at 25 Pa. Code Section 93.4a which require the protection and maintenance of existing/designated uses and the level of water quality necessary to protect those uses in all surface waters and protect and maintain water quality in special protection waters.</p> <p>25 Pa Code 102.8 Chapter 102 contains post construction stormwater management requirements for all development and redevelopment activities that disturb 1 acre or more of earth. The requirements of Chapter 102 satisfy the requirements at 40 CFR 122.34(b)(5)</p>
C	Ensure adequate long-term operation and maintenance (O&M) of BMPs.	<p>25 Pa. Code Section 93.4a The PCSM Plan must include requirements for BMP specifications, including operations and maintenance requirements. In addition, the operation and maintenance of the post construction BMPs is necessary to prevent pollution or the threat of pollution to waters of the Commonwealth under the Clean Streams Law (35 P.S. Section 691.401).</p> <p>25 Pa Code 102.8 Chapter 102 contains post construction stormwater management requirements that ensure proper long-term operation and maintenance of stormwater BMPs for all development and redevelopment activities that disturb 1 acre or more of earth.</p>

Permittees choosing not to rely on DEP's statewide program for issuing NPDES Permits for Stormwater Discharges Associated with Construction Activities to satisfy the first three BMPs under this MCM #5 must develop, implement, and enforce a complete program to reduce the discharge of pollutants in any stormwater runoff entering the permittee's regulated small MS4s from areas that are developed or redeveloped in accordance with an NPDES permit for stormwater discharges associated with construction activities. Permittees implementing their own programs must implement measures to satisfy all of the requirements for this MCM #5 as established at 40 CFR §122.34(b)(5):

- Develop a written program to satisfy all required components of this MCM.
- Develop and implement strategies which include a combination of structural and/or non-structural BMPs appropriate for the local regulated community;
- Ensure that controls are installed that shall prevent or minimize WQ impacts.
- Use an ordinance or other regulatory mechanism to address post-construction runoff from new development and redevelopment projects.
- Develop and implement measures to encourage and expand the use of Low Impact Development (LID) in new development and redevelopment. This includes keeping an inventory of LID BMPs that have been installed and removing provisions in municipal ordinances that conflict with the use of LID practices.
- Implement measures to ensure adequate Operation and Maintenance (O&M) of all PCSM BMPs installed at all qualifying development or redevelopment projects.

In all cases, municipalities, including counties, may not issue a building or other permit or final approval to anyone proposing to conduct earth disturbance activities until the required NPDES Construction permit (or approved coverage under a General NPDES Permit) has been issued by DEP or by a delegated County Conservation District (CCD).

Municipalities that implement local programs to regulate post-construction stormwater controls may choose to negotiate an agreement (contract) with their CCD for services such as plan reviews, construction inspection, post construction inspections, and training.

Permittees who rely on DEP's statewide permitting program for Stormwater Discharges Associated with Construction Activities to satisfy the first three (3) BMPs under this MCM #5 still must implement a written program that includes BMPs to satisfy the last three (3) bulleted items listed above (e.g the last three (3) BMPs under this MCM #5).

The ordinance enactment BMP requires permittees to either

- a) Enact, implement, and enforce an ordinance from an Act 167 Stormwater Management Plan (SMP) approved by DEP in 2005 or later; or
- b) Enact an MS4 Stormwater Management Ordinance; or
- c) Demonstrate that an ordinance(s) that satisfies all applicable requirements has been enacted and implemented by completing, signing, and submitting with the PAG-13 NOI the appropriate MS4 Stormwater Management Checklist.

Pollution Prevention/Good Housekeeping for Municipal Operations

In accordance with 40 CFR §122.34(b)(6), permittees must develop and implement an operations and maintenance program that includes a training component and has the goal of preventing or reducing pollutant runoff from municipal operations. Permittees must fully implement and achieve measurable goals established for three (3) BMPs to comply with this MCM and meet the following requirements in accordance with 40 CFR §122.34(b)(6):

- Identify and document all municipal facilities that have the potential to generate stormwater runoff to the permittee's regulated small MS4.
- Develop, implement, and maintain a written O&M program that includes a training component and has the ultimate goal of preventing or reducing pollutant runoff from municipal operations to the permittee's regulated small MS4; and

- Develop and implement an employee training program to prevent and reduce the amount of stormwater pollution entering the permittee's regulated small MS4s from activities such as maintenance of parks and open spaces, maintenance of fleets and buildings, new construction and land disturbances, and stormwater system maintenance.

Permittees are encouraged to arrange and schedule joint training events with other nearby operators of regulated small MS4s to improve efficiency and reduce costs.

D. Total Maximum Daily Load (TMDL) Requirements

A TMDL is the maximum amount of a pollutant that a water body can receive and still meet water quality (WQ) standards, and an allocation of that load among the various sources of that pollutant. Pollutant sources are characterized as either

- Point sources - only point sources can receive a TMDL as a Waste Load Allocation (WLA)
- Nonpoint sources - Nonpoint sources receive a TMDL as a Load Allocation (LA)

Point sources include all sources subject to regulation under the NPDES program (e.g., stormwater discharges from regulated small MS4s).

A TMDL document shows the calculations for determining the maximum amount (load) of each pollutant of interest that may enter a waterbody without exceeding the WQ standards, plus the calculations for allocating that maximum pollutant load among the permitted point sources (WLA) and nonpoint sources (LA). The LA sources may include both anthropogenic and natural background sources of the pollutant. A WLA is the portion of a receiving water's loading capacity allocated to existing or future point sources of pollution, which may include permitted stormwater discharges from regulated small MS4s.

For each regulated small MS4 that discharges stormwater into any receiving waters with an applicable wasteload allocation in an approved TMDL as of the date of submission of a complete NOI, permittees must provide a plan to achieve pollutant reductions consistent with applicable wasteload allocations in approved TMDLs.

If any portion of your regulated small MS4 is located in and discharging to receiving watersheds draining to the Chesapeake Bay, then you must develop, submit to DEP for approval, and ensure implementation of a Chesapeake Bay Pollutant Reduction Plan in accordance with Part C(3) of the Authorization to Discharge. If you are required to develop, submit to DEP for approval, and ensure implementation of an MS4 TMDL Plan to meet a waste load allocation (WLA) for nitrogen, phosphorus, or sediment as described in Part C(1) of the Authorization to Discharge, then you may rely on and incorporate into the Chesapeake Bay Pollutant Reduction Plan the portions of such MS4 TMDL Plans that address nitrogen, phosphorus, and sediment associated with existing stormwater discharges. Your Chesapeake Bay Pollutant Reduction Plan must be submitted within 12 months of the effective date of your Approval of General Permit Coverage.

Your annual reports must include a summary of your progress with developing, submitting to DEP for approval, and ensuring implementation of your Chesapeake Bay Pollutant Reduction Plan. If you are required to develop, implement, and enforce an MS4 TMDL Plan, then your annual report also must summarize your progress with the MS4 TMDL Plan in accordance with Section II.F.2 of the Authorization to Discharge.

Permittees with regulated small MS4s that discharge to an area covered by a watershed or regional TMDL Implementation Plan should consider incorporating pollutant controls consistent with the watershed or regional plan.

In areas subject to an applicable and approved wasteload allocation, permittees must develop, submit to DEP for approval, and ensure implementation of an MS4 TMDL Plan that is consistent with the applicable wasteload allocations in approved TMDLs. The MS4 TMDL Plan must be designed to achieve the pollutant reductions established by the applicable WLAs. MS4 TMDL Plans, when required, must be submitted to DEP with the a Notice of Intent (NOI) for Coverage under NPDES General Permit for Stormwater Discharges (PAG-13) from small Municipal Separate Storm Sewer Systems (MS4s).

The MS4 TMDL Plan submitted with the NOI does not need to include final design details for BMPs that will be implemented during the current permit term; however, design details for BMPs must be amended, in writing, to the MS4 TMDL Plan during the first year of permit coverage. The MS4 TMDL Plan must include a timeline (schedule) with milestones. The timeline may extend across multiple permit terms.

MS4 TMDL Plans must (using mathematical methods) demonstrate measurable progress toward substantial reductions in the applicable pollutant loads specified in the applicable WLAs of the TMDLs. The timeline in the plan must have physical pollutant removal measures installed on-the-ground in time for their successful operation to be documented in the periodic report submitted in the third year of coverage under the PAG-13 permit. MS4 TMDL Plans must be signed and sealed by a Professional Engineer (PE) holding a valid license in good standing from the Pennsylvania Department of State (DOS).

MS4 TMDL Plans should incorporate appropriate content from Nonpoint Source Implementation Plans (CWA Section 319 Plans), Watershed Restoration Strategy Plans, County Comprehensive Plans (Act 247 Plans), as well as other applicable resources.

MS4 TMDL Plans may include measures located within the geographic areas that drain to the regulated small MS4s and reduce applicable pollutant loads consistent with approved TMDLs that were implemented by the permittee between the time WQ assessments were completed and the date of the Approval to Discharge. The calculated or reported pollutant removal benefits of an MS4 TMDL Plan may not include benefits of any measures implemented by anyone else as a condition of any other NPDES permit.

Permittees must implement all measures needed to reduce pollutant loads consistent with the applicable wasteload allocations in approved TMDLs in accordance with the schedule in the approved MS4 TMDL Plan. Implementation of these measures can be adaptive, iterative, and dynamic. The MS4 TMDL Plan must be evaluated and updated continuously, as necessary, based on its effectiveness in reducing pollutant loads in discharges from regulated small MS4s.

Permittees must report on progress made with implementation of approved MS4 TMDL Plans in periodic reports. Reports on implementation must include reductions in pollutant load attained by implementation of TMDL control measures and BMPs, broken down measure by measure and BMP by BMP. Reports must demonstrate that the required pollutant loads are being achieved and are consistent with the applicable wasteload allocations in approved TMDLs. This can be demonstrated by showing how measurable implementation progress is being made toward reducing loads as required by the wasteload allocations in accordance with the implementation schedule in the approved MS4 TMDL Plan and the end date for ultimate attainment of the pollutant load reductions set forth in the applicable wasteload allocations of the approved TMDLs.

E. Monitoring, Recordkeeping, Reporting, and Program Review

Monitoring

New permittees must screen all identified outfalls from their regulated small MS4s during Dry Weather on at least two (2) different occasions during the permit coverage term. In each year of permit coverage, at least forty percent (40%) of all outfalls should be screened.

Renewal permittees must screen all identified outfalls from their regulated small MS4s during Dry Weather at least once during each permit coverage term.

If screening reveals dry weather flow, the discharge from the outfall and the area around the outfall must be inspected visually for color, turbidity, sheen, floating or submerged solids, adverse affects on plants or animal in proximity to the outfall, and for odor. If screening indicates that the discharge may contain pollutants, samples must be collected for field and/or lab testing for selected chemical and biological parameters to aid in determining if the dry weather flow is illicit. There are no numeric effluent limitations established in PAG-13, but it is suggested that testing include the following parameters: pH; conductivity; E. Coli bacteria; fecal coliform bacteria; metals; suspended solids; dissolved solids; oils; ammonia; surfactants; chlorine; and fluoride.

Recordkeeping

Permittees must retain copies of the documentation related to the SWMP developed in accordance with this GP for a minimum of three (3) years or until at least one (1) year after coverage under this General Permit terminates, whichever occurs later. Permittees must retain all records of all monitoring information, copies of all reports required by this General Permit, and records of all data used to complete the NOI until at least one (1) year after coverage under this General Permit terminates. In addition, permittees must retain on-site, at all times, a complete copy of the NOI, PAG-13, and any

authorizations received from DEP pursuant to PAG-13, until at least one (1) year after coverage under PAG-13 terminates.

Reporting

New permittees and all permittees with any portion of a regulated small MS4 discharging stormwater into the Chesapeake Bay Watershed shall submit an Annual Report to DEP no later than 90 days following the end of each permit year during the term of coverage under this General Permit reporting on SWMP activities performed during each preceding time periods.

Renewal permittees with no portion of a regulated small MS4 discharging stormwater into the Chesapeake Bay Watershed shall submit Progress Reports to DEP documenting the SWMP activities that were performed. Reports for these permittees are due to DEP no later than 60 days following the end of the 1st and 3rd years of renewed coverage, and a summary report also shall be submitted with any NOI for any subsequent permit renewal.

All reports must include information regarding the following:

- Status of compliance with the conditions of this PAG-13 and progress towards meeting the measurable goals of each MCM;
- Status of progress towards implementing the Stormwater Management Program (SWMP) to reduce the discharge of pollutants to the MEP and comply with water quality standards.
- Assessment of the appropriateness of the BMPs;
- Steps to be taken to address any deficiencies in the BMPs or other aspects of the SWMP developed by the permittee;
- Results of information collected and analyzed during the reporting period;
- Summary of stormwater activities planned during the next reporting cycle;
- Any proposed changes to the permittee's SWMP, including changes to BMPs, measurable goals, or responsible parties;
- Notices, intergovernmental agreements, and other relevant unpublished documents in connection with relying on another governmental entity to satisfy permit obligations;
- Progress with implementation of the MS4 TMDL Plan, including a summary of implementation and monitoring data of all control measures and of all BMPs implemented in connection with the MS4 TMDL Plan;
- For new permittees, a letter signed by a municipal official, municipal engineer or the municipal solicitor as an attachment to the first year report certifying the enactment of either an ordinance from an Act 167 SMP approved by DEP in 2005 or later; enactment of an MS4 Stormwater Management Ordinance; or a completed and signed MS4 Stormwater Management Ordinance Checklist to demonstrate that an ordinance(s) that satisfies all applicable requirements has been enacted.

Reports shall be in the format provided by DEP. Report Forms are available on DEP's website at <http://www.depweb.state.pa.us> , keyword: Stormwater.

Program Review

Permittees shall evaluate the effectiveness of their stormwater management programs and chosen BMPs. The process of developing a stormwater management program, implementing the program, and evaluating the program is a dynamic, iterative process that helps move MS4 communities toward achievement of their stormwater goals, including the ultimate goal of attaining water quality standards.

F. Relationships Among County Conservation Districts, DEP, and PAG-13 Permittees

Pennsylvania County Conservation Districts are created when the governing body of a county adopts a resolution declaring the county a conservation district pursuant to 1945 Act 217. Conservation Districts are public bodies that are "... corporate and politic exercising public powers of the Commonwealth as an agency thereof." Each Conservation District is responsible to its board of directors who are appointed by the county's governing body. One member of the county's governing body serves as a director of the Conservation District.

DEP has delegation agreements with some Conservation Districts under which the Conservation Districts provide assistance to DEP for implementation of DEP's program for NPDES permits for Stormwater Discharges Associated with Construction Activities. Under these delegation agreements, Conservation Districts are delegated certain responsibilities and authorities necessary to implement aspects of the NPDES construction stormwater permitting program (for more information, refer to the Tables on the previous pages which explain roles and responsibilities). No Conservation Districts have been delegated responsibilities by DEP in connection with the NPDES MS4 permitting program; therefore, Conservation Districts have no oversight or enforcement responsibilities or authorities regarding that program pursuant to their formal delegation agreement from DEP. A list of Conservation Districts and their respective delegated authority can be found by visiting <http://www.depweb.state.pa.us>, keyword: Stormwater, then clicking on the General Information link.

PAG-13 permittees may develop their own agreements with Conservation Districts under which the Conservation District would provide services to the permittee to help the permittee meet the terms and conditions of its NPDES MS4 permit. However, the permittee continues to be responsible for compliance with the terms and conditions of the permit regardless of whether the permittee enters into an agreement with a Conservation District.

11. Summary of Permit Requirements

Federal regulations issued in 1999 establish a permit requirement within the NPDES for discharges to surface waters from certain MS4s. The permit requirement applies to "regulated small MS4s" which are designated by either EPA or DEP. The current list of municipalities with designated small MS4s can be obtained from DEP regional offices listed at the end of this Fact Sheet, or at www.depweb.state.pa.us, keyword Stormwater.

The permit term is for a maximum of five years, followed by subsequent permits for similar timeframes. Owners or operators of regulated small MS4s must apply for permit coverage by submitting an application for an individual permit or a Notice of Intent (NOI) to use this PAG-13, or apply for a waiver from permit coverage by submitting an application or an NOI together with a Request for Waiver form. The application or NOI must describe the program that the permittee intends to implement, including BMPs to meet the measurable goals for each element of the municipal program. The Stormwater Management Program (SWMP) to be used with this General Permit (PAG-13) is included as Appendix A to the Authorization to Discharge.

What are the requirements? The permittee must, develop, implement, and enforce a Stormwater Management Program to reduce the discharge of pollutants from its regulated small MS4s to the Maximum Extent Practicable (MEP) to meet water quality standards and satisfy the appropriate water quality requirements of the federal Clean Water Act and the Pennsylvania Clean Streams Law.

The permittee's MS4 Stormwater Management Program must be approved by DEP and contain BMPs and measurable goals for each of the six MCMs described below. Also, as a part of the SWMP, the owner or operator must enact and implement either the MS4 Operation and Maintenance Ordinance, the MS4 Stormwater Management Ordinance; a Model Ordinance from an applicable Act 167 Stormwater Management Plan approved by DEP in 2005 or later; or an ordinance(s) that satisfies the MS4 Operation and Maintenance Checklist or the MS4 Stormwater Management Ordinance Checklist.

The federal regulations establish six MCMs that must be implemented by permittees (these are "narrative" permit effluent limitations). The six MCMs in the federal regulations are:

1. Public education and outreach on storm water impacts,
2. Public involvement / participation,
3. Illicit discharge detection and elimination,
4. Construction site storm water runoff control,
5. Post-construction storm water management in new development and redevelopment, and
6. Pollution prevention / good housekeeping for municipal operations

Permittees may indicate in the Notice of Intent to use PAG-13 that the permittee will rely on DEP's QLP to satisfy all requirements under MCM #4 and the requirements under BMPs #1 through #3 in MCM #5.

Permittees whose regulated small MS4s are located in, or discharge to, a waterbody for which an applicable wasteload allocation has been established in an approved Total Maximum Daily Load (TMDL) must develop,

submit to DEP for approval, and ensure implementation of measures to reduce pollutant loading consistent with the applicable wasteload allocations in the approved TMDLs.

Permittees with regulated small MS4s located in and discharging to receiving watersheds draining to the Chesapeake Bay must develop, submit to DEP for approval, and ensure implementation of a Chesapeake Bay Pollutant Reduction Plan.:

12. Summary of Significant Changes from the Previous Permit

Although there have been no changes to the regulations, changes have been made to the permit to improve consistency with the regulations and to improve clarity. The significant changes include the replacement of the *Protocol* with the Stormwater Management Program (SWMP); clarification that the permittee may rely on DEP's permitting program for NPDES Stormwater Discharges Associated with Construction Activities to satisfy MCM #4 and BMPs #1 through #3 in MCM #5; the requirement to develop, submit to DEP for approval, and ensure implementation of measures (in the form of an MS4 TMDL Plan) to reduce pollutant loads in discharges from regulated small MS4s consistent with applicable wasteload allocations in approved TMDLs; requirements for permittees with regulated small MS4s discharging stormwater to receiving watersheds draining to the Chesapeake Bay to develop, submit to DEP for approval, and ensure implementation of a Chesapeake Bay Pollutant Reduction Plan; and requirements for discharges to impaired waters; and permittees now have the option to choose one of three methods for meeting the requirement to enact and implement an ordinance.



COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF POINT AND NON-POINT SOURCE MANAGEMENT

APPLICANT INFORMATION FOR A JOINT NPDES MS4 AUTHORIZATION

FOR STORMWATER DISCHARGES FROM SMALL MUNICIPAL SEPARATE STORM SEWER SYSTEMS (MS4s)

If line A.1. was marked "Yes" on the NOI or IP Application, then this form must be completed by each and every member of the joint application and submitted with the NOI or IP Application.

If you currently have an individual NPDES MS4 Permit, or coverage under PAG-13, please provide your Permit or PAG-13 Authorization Number: _____

A. MS4 Joint Applicant	
1.	Name of MS4 Operator (Joint Applicant):
2.	Contact Person:
3.	Title/Role:
4.	Division: Department:
5.	Phone Number: Fax:
6.	E-mail:
7.	Mailing Address:
	Address Line 1:
	Address Line 2:
	City: State:
	Zip Code:

B. Stormwater Management Ordinance

Indicate by checking one of the boxes below whether you have an existing ordinance from an Act 167 Plan approved by DEP in 2005 or later; or you plan to adopt an MS4 Stormwater Management Ordinance that corresponds to the checked box in E(4)-(5) of the NOI or IP Application; or you have completed and attached an MS4 Stormwater Management Ordinance Checklist that corresponds to checked box in E(4)-(5) of the NOI or IP Application.

The applicant will satisfy, one of the following (Check one and fill-in blanks where indicated.):

<p>F.1.</p> <p><input type="checkbox"/> <u>By the end of the first year of coverage under this permit, you will enact and implement either: a) the MS4 Stormwater Management Ordinance corresponding to the checked box in E(4)-(5); or, b) an ordinance from an Act 167 Plan approved in 2005 or later; or, c) an ordinance that satisfies all applicable requirements on a completed and signed MS4 Stormwater Management Ordinance Checklist corresponding to the checked box in E(4)-(5).</u></p>	<p><u>OR</u></p>	<p>F.2.</p> <p><input type="checkbox"/> Already have enacted and implemented an Act 167 Stormwater Management Ordinance from an Act 167 Plan approved in 2005 or later. Provide the enactment date and number of your stormwater management ordinance</p> <p>Number: _____</p> <p>Date: _____</p>	<p><u>OR</u></p>	<p>F.3.</p> <p><input type="checkbox"/> The MS4 Stormwater Management Ordinance Checklist is completed, signed, and attached, and all applicable requirements are satisfied. If your ordinance already is enacted, provide the enactment date and number of your stormwater management ordinance</p> <p>Number: _____</p> <p>Date: _____</p>
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C. Compliance History Review

Has this joint applicant been in violation during the past 5 years of any permits issued by DEP, or any orders, regulations or schedules of compliance? Yes No

If yes, list each permit, order, regulation, or schedule that is/was in violation and provide compliance status of the permitted activity (use additional sheets to provide information on all permits).

Brief Description of Non-Compliance:

Steps Taken to Return to Compliance and Dates Compliance Achieved:

D. List all Joint Permittees

Identify all Joint Permittees in the following table. Include yourself. Attach additional sheets if necessary.

No.	Name and address of Joint Permittee.	Contact name and phone number.
1		
2		
3		
4		
5		
6		
7		
8		
9		

E. Certification:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

Name and official title: (Please Print or Type name and title. Use corporate or professional seal as appropriate)

Signature: _____ Date Signed: _____