



Spotts, Stevens and McCoy Engineering | Surveying | Environmental Services ssmgroup.com

PERKIOMEN TOWNSHIP MS4 PERMITTING 2022 UPDATE



Date: June 7, 2022
Board of Supervisors Meeting

What is MS4?

- MS4 <u>Municipal Separate Storm Sewer System</u>
 - Municipal Collection & Conveyance Systems
 - PA DFP NPDFS Permit "Small MS4"
 - Annual Reporting
 - July 1 June 30
 - Objectives: Improve Water Quality & Promote Public Participation

3800-PM-BCW0100d 5/2016
Permit

pennsylvania
DEPARTMENT OF BAYRONMENTAL

COMMONWEALTH OF PENNSYLVANIA EPARTMENT OF ENVIRONMENTAL PROTECTION

PAG-13

AUTHORIZATION TO DISCHARGE UNDER THE
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
GENERAL PERMIT FOR STORMWATER DISCHARGES FROM
SMALL MUNICIPAL SEPARATE STORM SEWER SYSTEMS (MS4s)
APPROVAL OF COVERAGE

NPDES PERMIT NO. PAG130069

In compliance with the provisions of the Clean Water Act, 33 U.S.C. Section 1251 et seq. ("the Act") and Pennsylvania's Clean Streams Law, as amended, 35 P.S. Section 691.1 et seq.,

Perklomen Township Montgomery County 1 Trappe Road Collegeville, PA 19426-1829

is authorized to discharge from a regulated small municipal separate storm sewer system (MS4) located in Perkiomen Township, Montgomery County to Schoolhouse Run (TSF, MF), Perkiomen Creek (WWF, MF), Unnamed Tributary of Perkiomen Creek (TSF, MF) in Watershed(s) 3-E in accordance with effluent limitations, monitoring requirements and other conditions set forth herein

APPROVAL OF COVERAGE TO DISCHARGE UNDER THIS GENERAL NPDES PERMIT IS AUTHORIZED BEGINNING ON May 28, 2021. WHEN THE GENERAL PERMIT IS RENEWED, REISSUED OR MODIFIED, THE FACILITY OR ACTIVITY COVERED BY THIS APPROVAL FOR COVERAGE MUST COMPLY WITH THE FINAL RENEWED, REISSUED OR MODIFIED GENERAL PERMIT.

The authority granted by coverage under this General Permit is subject to the following further qualifications:

- The permittee shall comply with the effluent limitations and reporting requirements contained in this General Permit
- 2. Following initial coverage under this General Permit, the submission of Annual MS4 Status Reports in accordance with Part A III.D of the General Permit shall constitute the permittee's Notice of Intent (NOI) for continued coverage under the General Permit. The permittee shall be responsible for complying with the final renewed, reissued or amended General Permit. If the permittee is unable to comply with the renewed or amended General Permit, an application for an individual NPDES permit within 90 days of publication of the final General Permit.
- The NOI and its supporting documents are incorporated into this approval of coverage. If there is a conflict between the NOI or its supporting documents and the terms and conditions of this General Permit, the terms and conditions of this General Permit shall apply.
- Failure to comply with the terms, conditions, or effluent limitations of this General Permit is grounds for enforcement action, permit termination or revocation.
- 5. The permittee shall implement Pollutant Control Measures as specified in Appendix B
- The permittee shall achieve pollutant loading reductions for sediment as specified in Appendix E by May 30, 2026.

This approval of coverage is authorized by:

Thomas L. Magge
Environmental Program Manager
Southeast Regional Office

Department of Environmental Protection



What is an MCM?

- MCM Minimum Control Measures
 - 1 Public Education & Outreach
 - 2 Public Involvement / Participation
 - 3 Illicit Discharge Detection & Elimination (IDD&E)
 - 4 Construction Site Stormwater Runoff Control
 - <u>5 Post-Construction Stormwater Management</u>
 - 6 Pollution Prevention / Good Housekeeping

PA Clean Water Academy

PRP - Pollution Reduction Plan



What is a BMP?

- BMP Best Management Practice
 - <u>Techniques</u>, Activities, Practices, Measures, or Structural Controls used to Manage and Improve the Quality of Stormwater Runoff

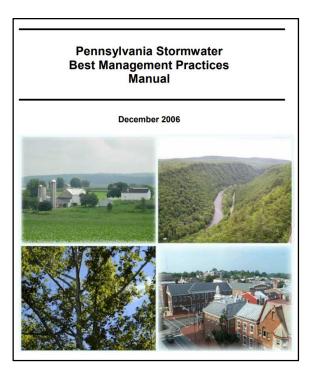








Infiltration Bed





MCM 1 – Public Education & Outreach

- BMP 1 Develop, Implement, & Maintain Public Outreach Program
- BMP 2 Maintain a Target Audience List
- BMP 3 Publish Educational Items
- BMP 4 Distribute Educational Materials to Target Audience







Don't Let Storm Water Run Off With Your Time and Money!

What the Construction Industry Should Know About Storm Water In Our Community

he construction industry plays an important role in improving our ommunity's quality of life by not only providing new development, ut also protecting our streams and rivers through smart business

ractices that prevent pollution from leaving construction sites. torm water runoff leaving construction sites can carry pollutants uch as dirt, construction debris, eil, and paint off-site and into orm drains. In our community, storm drains carry storm water moff directly to local creeks, streams, and rivers with no eatment. Developers, contractors, and homebuilders can help to

What is Storm Water?

- event storm water pollution by taking the following steps: 1. Comply with storm water permit requirements
- 2. Practice erosion control and pollution prevention practices to keep construction sites "clean.
- 3. Conduct advanced planning and training to ensure proper implementation on-site

he remainder of this fact sheet addresses these three steps.

torm Water Permit Requirements for Construction Activity lanning and permitting requirements exist for construction activities. hese requirements are intended to minimize storm water pollutants

- aving construction sites. Pennsylvania's Erosion and Sediment Pollution Control Program (25 Pa. Code, Chapter 102) requires Erosion and Sediment Control
- Plans for all earth disturbing activities. The National Pollutant Discharge Elimination System (NPDES)
- Permit Program (25 Pa. Code, Chapter 92) requires that construction activities disturbing greater than one acre submit a Notice of Intent for coverage under a general NPDES permit.

owing your requirements before starting a project and following them during construction can ne and money, and demonstrate that you are a partner in improving our community's quality of life. For nore information about these programs, contact your local county conservation district office or the epartment of Environmental Protection.

Erosion Control Practices:

- Phased, minimized grading



An Ounce of Prevention

Rain that falls onto construction sites is likely to carry away soil particles and other toxic chemicals present on onstruction sites (oil, grease, nazardous wastes, fuel). Storm water, if not properly managed, carries these pollutants to streams, rivers, and lakes. Prosion and sediment control practices an serve as a first line of defens



MCM 2 – Public Involvement / Participation

- BMP 1 Develop, Implement, & Maintain Public Participation Program (PIPP)
- BMP 2 Provide Public MS4 Related Notices
- BMP 3 Solicit Public Involvement



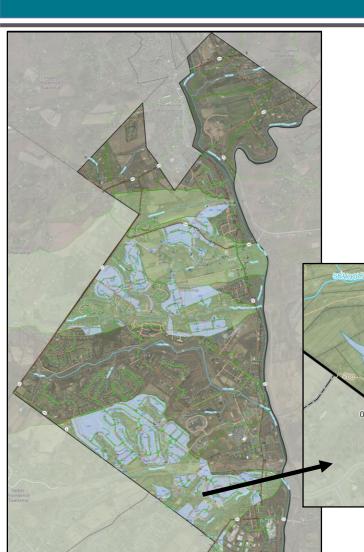
2022 Municipal Members with MS4 benefits:

Perkasie Borough

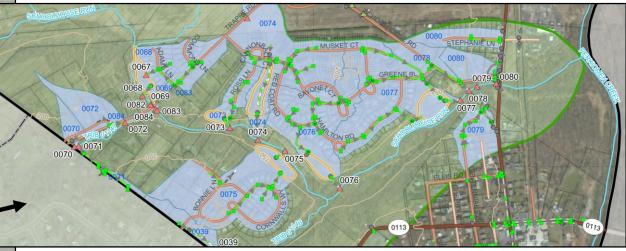
East Greenville Borough Marlborough Township Salford Township Upper Pottsgrove Hilltown Township West Rockhill Township Lower Pottsgrove Borough of Pennsburg Lower Providence Township New Hanover Township Upper Milford Township Schwenksville Borough Lansdale Borough Lower Frederick Upper Frederick Township Lower Salford Township Limerick Township Upper Gwynedd Township Sellersville Borough Towamencin Township Borough of Trappe Borough of Souderton Upper Salford Township Perkiomen Township Telford Borough



MCM 3 – Illicit Discharge Detection & Elimination



- BMP 1 Develop and Implement a Written Program
- BMP 2 Maintain Mapping of MS4 System and Outfalls
- BMP 3 Maintain Map so Storm Sewer Collection and Conveyance System





MCM 3 – Illicit Discharge Detection & Elimination

- BMP 4 Conduct Dry Weather Screening at Outfalls
- BMP 5 Enact 2022 Model Stormwater Ordinance
- BMP 6 Provide Education Outreach to Target Audience on Detecting IDDE

PUBLIC NOTICE

Perkiomen Township has prepared a Pollution Reduction Plan (PRP) for the TRIB 01167, TRIB 01165, Landis Creek, and Schoolhouse Run. This PRP will be available for public review on the Perkiomen Township web site (www.perkiomentownship.org). Copies are also available at the Township Administration Building, 1 Trappe Road, Collegeville: however, one must first call the Township at 610-489-4034 to arrange to pick up a copy between 9:00 a.m. and 4:00 p.m., Monday through Friday, except holidays. Beginning, Monday, March 22, 2021, interested persons may submit written comments to Perkiomen Township during the 30-day period of Tuesday, April 6, 2021 through Thursday, May 6, 2021. Written comments will also be accepted during the Board of Supervisors meeting scheduled for Tuesday, April 6, 2021 at 7:00 p.m. Because Perkiomen Township is under a Disaster Declaration due to COVID-19, this meeting will be held via Zoom, which is a telephone and video conferencing service. Information on how to join the Zoom meeting can also be found on the Township website. The PPP is a requirement of Perkiomen Township's National Pollutant Discharge Elimination System (NPDES) Municipal Separate Storm Sewer System (MS4) Permit.

Perkiomen Township Pollution Reduction Plan Jan 2021

PADEP has developed a booklet for those individuals who want to work in or adjacent to streams. Click here to access this booklet: PADEP Guidelines for Stream Maintenance Booklet



MCM 3 – Illicit Discharge Detection & Elimination













MCM 4 – Construction Site Stormwater Runoff Control

- BMP 1 Implement Program and Procedures to Ensure Permit Compliance
- BMP 2 Ensure Adequate Erosion & Sediment Pollution Control Measures / Notify DEP of Projects Over 1 Acre
- BMP 3 Enforce Ordinance & O&M Maintenance
- BMP 4 Review E&S Plans
- BMP 5 Perform E&S Inspections
- BMP 6 Conduct Enforcement when in Non-Compliance
- BMP 7 Develop Requirement for Site Operators to Control Waste
- BMP 8 Develop procedure for Handling a Complaint or Violation











Perkiomen / SSM Participation

- Ordinances:
 - SWM: §247-21 Erosion & Sedimentation Requirements
 - SALDO: §264-32 Erosion & Sediment Control Guidelines
- 1 Acre or more Disturbance (NPDES Permit) – MCCD
- Less than 1 Acre Disturbance SSM
- Enforcement / Tracking BMPs
- Complaints Citizens Complaint Form

	COL 610	1 TRAPPE ROAD LEGEVILLE, PA 19426 I-489-4034 (PHONE) 10-489-4918 (FAX)
	то	WNSHIP USE ONLY
Date Received: / /		`
Time:		Received By:
NAME & ADDRESS C	F VIOL	ATION / VIOLATOR
Owner Name(s):		
Address:		
Cross Streets:		and
City, State, Zip: Complaintant Signature: REQUESTED SERVIC	CE OR II	NFORMATION
TOWNSHIP RESPON Investigated On: /	SE /	By:
Time:		Response:

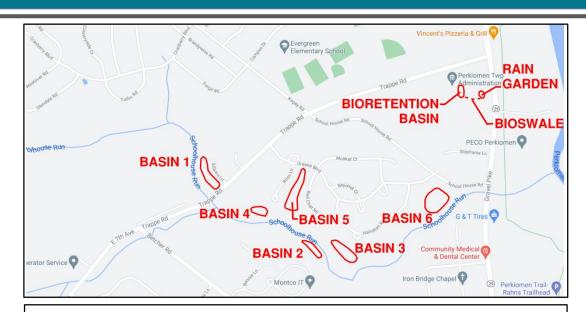


MCM 5 – Post- Construction Stormwater Management

- BMP 1 Enact, Implement, and Enforce Stormwater Ordinance
 - 2022 Model Stormwater Ordinance by 09/30/2022
- BMP 2 Encourage Low Impact Development (LID)
- BMP 3 Ensure Stormwater Operation & Maintenance (O&M)
 - Track BMP O&M Township Wide
- BMP 4 Requiring Adequate BMPs to Maintain Water Quality
- BMP 5 Ensure BMPs are Properly Constructed
- BMP 6 Develop and Implement a Written Program



MCM 5 – Post- Construction Stormwater Management



Stormwater Operation and Maintenance (O&M):

- Township
 - Perform Township BMP Maintenance Annually
- Residents
 - Criteria 1 Homeowner who individually owners their own BMP.
 - Upon Request
 - Criteria 2 All other parties proposing new improvements requiring an O&M agreement.
 - Per DEP Guidelines: (1) Annual Reporting for first 5 years; (2)
 Reporting every 3 years in perpetuity; (3) Reporting after a
 10-yr storm event; (4) Upon Township request.
- <u>Approach:</u> Let residents police themselves until an issue occurs, then become involved, if necessary.

150-	Pennsylvania DEPARTMENT OF ENVIRONME PROTECTION	DEPARTI NTAL BUR	OMMONWEALTH OF MENT OF ENVIRONI REAU OF WATERSHI	MENTAL PE ED MANAG	ROTECTION SEMENT	Permit No. Report No.	21-0	C460279 01
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				oject Area:	6.01 2.58			
								sturbed Area:
	nicipality: eiving Water(s):	Perkiomen UNT to Perkiomen		County:	ted/Existing Use:	Montgomery TSF, MF		
Res	sponsible Party(s):	UNI to remonie.		резь	teu/Existing osc.	13F, Ivii		
	(name & address)							
	Phone:							
Site	e Representative (r	name):	None	In	nspector (name): _ (title)			Fishpaw
	e Description & Obs the time of this insp	servations: section Lot 3 was bei	ng prepped for se	eed and n	nulch.	***		
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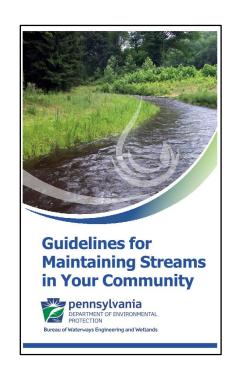


MCM 6 – Pollution Prevention / Good Housekeeping

- BMP 1 Maintain List of Operations Contributing to Runoff
- BMP 2 Implement Operation and Maintenance Program
- BMP 3 Implement Training Program to Township Staff, Public Officials, etc.

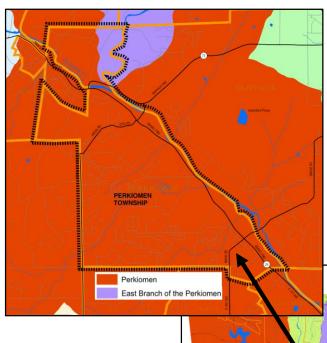








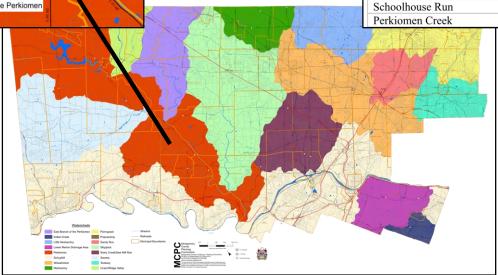
Perkiomen Watersheds & Streams



- East Branch Perkiomen Creek
 - East Branch Perkiomen Creek
- Perkiomen Creek / Unnamed Tributaries

Impaired Downstream Waters Name
Unnamed Tributaries to Perkiomen Creek¹

- Lodal Creek
- Schoolhouse Run
- Mine Run
- Landis Creek



Montgomery County, Pennsylvania



Impairment

Siltation

Siltation

Pathogens

What is a Pollutant Reduction Plan (PRP)?

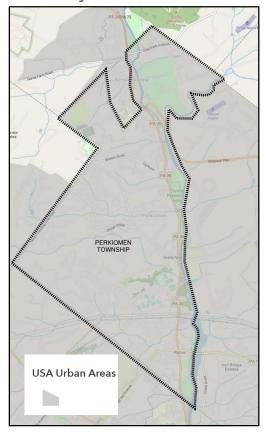
- PA DEP Mandate to Reduce Pollutants / Improve Water Quality
 - Siltation by 10%
 - Total Phosphorus by 5%
 - Total Nitrogen by 3%
- Based on Census Data "Urbanized Areas"
- Based on PA DEP "Loading Rates"

County	Category	Acres	TN lbs/acre/yr	TP lbs/acre/yr	TSS (Sediment) lbs/acre/yr
All Other	impervious developed	-	23.06	2.28	1,839
Counties	pervious developed	-	20.72	0.84	264.96

Utilizes BMP "Effectiveness"

BMP Name	BMP Effectiveness Values			PMD Description		
вмр нате	TN	TN TP Sediment		BMP Description		
Dry Extended Detention Basins	20%	20%	60%	Dry extended detention (ED) basins are depressions created by excavation of berm construction that temporarily store runoff and release it slowly via surface flow or groundwater infiltration following storms. Dry ED basins are designed to dry out between storm events, in contrast with wet ponds, which contain standing water permanently. As such, they are similar in construction and function to dry detention basins, except that the duration of detention of stormwater is designed to be longer, theoretically improving treatment effectiveness.		
Bioretention / Raingarden (A/B soils w/o underdrain)	80%	85%	90%	An excavated pit backfilled with engineered media, topsoil, mulch, and vegetation These are planting areas installed in shallow basins in which the storm water runor is temporarily ponded and then treated by filtering through the bed components, and through biological and biochemical reactions within the soil matrix and around the root zones of the plants. This BMP has no underdrain and is in A or B soil.		
Stream Restoration	0.075 lbs/ft/yr	0.068 lbs/ft/yr	44.88 lbs/ft/yr	An annual mass nutrient and sediment reduction credit for qualifying stream restoration practices that prevent channel or bank erosion that otherwise would be delivered downstream from an actively enlarging or incising urban stream. Applies to 0 to 3rd order streams that are not tidally influenced. If one of the protocols is cited and pounds are reported, then the mass reduction is received for the protocols.		

- Requires Mapping of "Planning Area"
 - Sewershed Area Draining to Municipal System in Urbanized Areas.





What is our Plan?



 Reduce Sediment by Stream Restoration

41,788 lbs Reduction Required.

1,300 LF Restoration = 42,600 lbs+/-





Stream Restoration







How are we doing? / What is Next?

GREAT! Currently No MCM Deficiencies (Per Checklist)!!!



SENT VIA ELECTRONIC MAIL TO cdaniel@perktwp.org

October 14, 2021

Cecile Daniel Perkiomen Township 1 Trappe Road Collegeville, PA 19426-1829

Re: MS4 Periodic Report Review Perkiomen Township MS4 UA NPDES Permit No. PAG130069 Perkiomen Township, Montgomery County

Dear Ms. Daniel:

Thank you for submitting your 2016-2018, 2019-2020 and 2020-2021 Annual MS4 Status Reports as required by the NPDES permit. The Department of Environmental Protection (DEP) has reviewed your reports and has the following comments:



MUNICIPAL SEPARATE STORM SEWER SYSTEM (MS4) REVIEW CHECKLIST FOR ANNUAL REPORTS

For the Reporting Period: 3/16/2016 to 6/30/2021

Permittee Name: Perkiomen Township Montgomery

NPDES P

NPDES Permit No.: PAG130069

Due Date: 9/30/2018, 9/30/2020, 9/30/2021
Date Received: 9/26/2018, 9/25/2020, 9/25/2021

szeredai, nick

From: Mahoney, Elizabeth <emahoney@pa.gov>
Sent: Friday, March 18, 2022 10:47 AM

To: szeredai, nick

Cc: cdaniel@perktwp.org; kepicardi; John Moran; morey, kent

Subject: RE: [External] 100685.0151 - Perkiomen Township - MS4 Meeting - Thank You

Attachments: PAG130069_MISC_20210922_Draft_v1 rev 3-18-22.pdf

Good morning, Nick:

First, I'd like to thank Perkiomen Twp., you and Kent for last month's call. I feel that our discussion was very productive. I've reconsidered the Township's annual report in the context of our conversation. Based on our discussion, I have revised the checklist to show MCM 6 as being adequately addressed. The revised checklist is attached. Please note that I will not be sending out a revised letter as the comments in the letter were advisory in nature.

Please let me know if you have any questions. Thank you

Beth



What is Next?

No.	Task / Requirement	Deadline	Notes
1	2022 Model Stormwater Ordinance	9/30/2022	PC Approved / In Progress
2	Prepare a Pathogens Map	9/30/2022	In Progress (Past Due 9/30/2019)
3	Pathogens - Inventory	9/30/2022	In Progress
4	2021-2022 Annual Reporting	9/30/2022	Start in 8/2022
5	Illicit Discharge Detection & Elimination (IDD&E)	3/15/2023	Planned for 4/2022
6	PRP Implementation / Stream Restoration Construction	3/15/2023	Bid and Const. 2022-2023



Files!

- 2017 Perkiomen Township Pollutant Reduction Plan
- 2019-2020 Perkiomen Township Annual Status Report
- 2021 Perkiomen Township Pollutant Reduction Plan
- 2020-2021 Perkiomen Township Annual Status Report
- 2020-2021 DEP Review
- 2020-2021 DEP Checklist
- Bridge St Stream Restoration Plans (In Progress)
- Bridge St Existing Conditions
- Township BMP Inspection Report
- Stormwater Ordinance (In Progress)
- Township MS4 NPDES PAG-13 (Through May 30, 2026)





Questions?



SPOTTS | STEVENS | MCCOY

Engineering, Surveying and Environmental Services ssmgroup.com

Nicholas Szeredai, PE

Municipal Engineer E: nick.szeredai@ssmgroup.com P: 610-468-4742