

**Conewago Township, Adams County
Pennsylvania**

**MS4 NOI and PRP
Submittal Package**



*Excellence Delivered **As Promised***

September 2017

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(MS4 Map on Exhibit A)

3800-PM-BCW0100c
NOI Checklist (Final)



PAG-13
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
GENERAL PERMIT FOR STORMWATER DISCHARGES FROM
SMALL MUNICIPAL SEPARATE STORM SEWER SYSTEMS
NOTICE OF INTENT (NOI) CHECKLIST

APPLICANT'S ✓ CHECKLIST

Applicant Name Conewago Township, Adams County

Check the following list to make sure you have included all the required information. Place a checkmark in the box provided for all items completed and/or provided. Failure to provide all of the requested information will delay the processing of the NOI.

ENCLOSE THIS CHECKLIST WITH YOUR COMPLETED NOI.

	REQUIREMENTS FOR ALL DISCHARGES	Check ✓ If Included	DEP Use Only
1.	One original and two copies of the completed NOI (3800-PM-BCW0100b).	<input checked="" type="checkbox"/>	
2.	NOI filing fee (\$500).	<input checked="" type="checkbox"/>	
3.	One original and two copies of the completed Waiver Application (3800-PM-BCW0100e), if applicable.	<input type="checkbox"/>	
4.	Stormwater map(s) (existing permittees) or topographic map(s) (MS4s with previous waivers and new applicants).	<input checked="" type="checkbox"/>	
5.	Memorandum of Understanding (MOU) or other written agreement with parties that will implement one or more BMPs, if applicable.	<input type="checkbox"/>	
6.	Chesapeake Bay Pollutant Reduction Plan (PRP), if applicable. (In addition, submit an electronic version or hard copy to DEP's Bureau of Clean Water).	<input checked="" type="checkbox"/>	
7.	PRP for Impaired Waters, if applicable. (In addition, submit an electronic version or hard copy to DEP's Bureau of Clean Water).	<input checked="" type="checkbox"/>	
8.	Stormwater Management Ordinance (municipal applicants seeking renewed coverage only).	<input type="checkbox"/>	
9.	Stormwater Management Ordinance Checklist (3800-PM-BCW0100g), if applicable.	<input checked="" type="checkbox"/>	
10.	Standard Operating Procedure(s) (non-municipal applicants seeking renewed coverage only).	<input type="checkbox"/>	
11.	Complete NOI packages for each co-applicant (joint NOIs only).	<input type="checkbox"/>	

3800-PM-BCW0100b

NOI (Final)



PAG-13
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
GENERAL PERMIT FOR STORMWATER DISCHARGES FROM
SMALL MUNICIPAL SEPARATE STORM SEWER SYSTEMS
NOTICE OF INTENT (NOI)

Before completing this form, read the step-by-step instructions provided in this NOI package.

Client ID# _____ Site ID# _____ Facility ID# _____	Related ID#s (If Known)		DEP USE ONLY	
	APS ID# _____	Auth ID# _____	Date Received	
			PAG _____	PDG?

GENERAL INFORMATION

Type of Permit: New Coverage Renewal of Coverage Permit No.: PA _____

Is a waiver of coverage being requested and is a waiver application attached to this NOI? Yes No

Is PAG-13 General Permit coverage requested for more than one MS4 applicant? Yes No

If Yes, submit this NOI for each co-applicant and complete the information below (see instructions):

Joint Client Name: _____ Joint Client Phone: _____

Joint Client Address: _____ Joint Client Contact: _____

Joint Client City, State, Zip: _____

MS4 CLIENT/OPERATOR INFORMATION

DEP Client ID#	Client Type/Code		
	MUNI		
Organization Name or Registered Fictitious Name	Employer ID# (EIN)	Dun & Bradstreet ID#	
Conewago Township, Adams County	23-1857656	095073370	
Mailing Address Line 1	Mailing Address Line 2		
541 Oxford Avenue			
Address Last Line – City	State	ZIP+4	Country
Hanover	PA	17331	USA
Client Contact Last Name	First Name	MI	Suffix
Small	Scott	A	
Client Contact Title	Phone	Ext	
Maintenance Supervisor	717-637-0411	0	
Email Address	FAX		
ssmall@conewagotwp.org	717-637-6826		

MS4 SITE INFORMATION

DEP Site ID#	Site Name				
	Conewago Township, Adams County MS4				
Urbanized Area (UA) Name(s)	UA Area (specify acres or mi²)				
Hanover, PA	3,233 acres				
County Name	Municipality Name	City	Boro	Twp	State
Adams	Conewago	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
County Name	Municipality Name	City	Boro	Twp	State
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Site Location Address Line 1	Site Location Address Line 2				

Site Location City	State	ZIP+4	
Detailed Written Directions to Site			
Site Contact Last Name	First Name	MI	Suffix
Site Contact Title		Site Contact Firm	
Mailing Address Line 1		Mailing Address Line 2	
Address Last Line – City		State	ZIP+4
Phone	Ext	FAX	Email Address
SIC Code(s) (List All That Apply)		NAICS Code(s)	
Site-to-Client Relationship			

STORMWATER DISCHARGE INFORMATION

Map(s). Attach a map(s) to the NOI that identifies all stormwater discharge points (outfalls) from the MS4 to surface waters. For MS4s with existing permit coverage (that did not receive a waiver from DEP during the latest permit term), the map must include all elements required by MCM #3 in the NPDES permit. See instructions.

Surface Water Information. For each surface water body that receives stormwater discharges from the MS4, list the surface water, the furthest downstream outfall ID number, and the surface water's existing use, impairment and TMDL/WLA information in the table below. See instructions. **NOTE** – If the MS4 discharges to any surface water whose existing use is HQ or EV, the MS4 must apply for an individual permit.

Surface Water Name	Outfall No.	Ch. 93 Existing Use	Impaired?	Approved TMDL?	WLA?
Plum Creek	014	WWF	Yes	No	No
Tributaries to South Branch of Conewago Creek	022	WWF	Yes	No	No
South Branch of Conewago Creek	030	WWF	Yes	No	No

Outfall Locations. For each outfall identified in the table above, list the latitude and longitude coordinates. Identify the Horizontal Reference Datum used to determine the coordinates.

Outfall No.	Latitude			Longitude		
	Degrees	Minutes	Seconds	Degrees	Minutes	Seconds
001	39	47	54.54	77	00	12.27
002	39	47	54.63	77	00	12.51
003	39	47	46.32	77	00	17.61
004	39	47	45.86	77	00	18.13
005	39	47	28.36	77	00	59.61
006	39	47	27.27	77	01	08.57
007	39	47	46.18	77	01	37.37
008	39	47	58.67	77	01	44.83
009	39	48	01.68	77	01	47.30
010	39	48	07.06	77	01	52.24
011	39	48	11.64	77	01	53.97
012	39	48	13.15	77	02	13.82
013	39	48	26.28	77	02	08.24
014	39	48	28.32	77	02	10.10
015	39	48	37.76	77	00	05.32
016	39	48	42.97	77	00	08.32
017	39	48	42.97	77	00	08.56
018	39	48	45.61	77	00	18.72
019	39	48	55.28	77	00	26.29
020	39	49	27.71	77	01	01.89
021	39	49	21.80	77	01	55.62
022	39	49	34.22	77	02	06.95
023	39	46	59.57	77	02	45.85
024	39	47	17.51	77	03	04.47
025	39	47	23.58	77	03	10.19
026	39	47	35.93	77	03	21.08
027	39	48	05.78	77	02	32.66
028	39	48	06.32	77	02	45.92
029	39	48	43.10	77	02	44.97
030	39	48	53.47	77	02	43.31

Horizontal Reference Datum: NAD of 1927 NAD of 1983 WGS of 1984 Unknown

TMDL Details. For any surface water with an approved TMDL in which a WLA is applicable to the MS4, provide the WLAs below.

Surface Water Name	TMDL Name	Pollutant Name	TMDL WLA (lbs/yr)	Specific or General
None				

MS4 Requirements. Are requirement(s) specified in DEP's MS4 Requirements Table for the MS4? Yes No

If Yes, summarize the requirements below by checking all boxes that apply:

- Appendix A (AMD Metals and pH)
- Appendix B (Pathogens)
- Appendix C (Priority Organic Compounds)
- Appendix D (Chesapeake Bay Nutrients/Sediment) Pollutant Reduction Plan attached to NOI
- Appendix E (Impaired Waters Nutrients/Sediment) Pollutant Reduction Plan attached to NOI

Appendices D and E require the applicant to submit documentation of a public involvement and participation process. See the Pollutant Reduction Plan Instructions (3800-PM-BCW0100k).

NOTE – If the MS4 Requirements Table specifies submission of a TMDL Plan, the MS4 must apply for an individual permit.

STORMWATER MANAGEMENT PROGRAM

Minimum Control Measure (MCM)	BMP #	BMP Summary	Responsible Party	Contact Name	Contact Phone No.	MOU or Agreement?
#1 – Public Education and Outreach	1	Develop, implement and maintain a written Public Education and Outreach Program.	Applicant	Scott Small	717-637-0411	<input type="checkbox"/>
	2	Develop and maintain lists of target audience groups that are present within the areas served by the permittee's regulated small MS4.	Applicant	Scott Small	717-637-0411	<input type="checkbox"/>
	3	The permittee shall annually publish at least one issue of a newsletter, a pamphlet, a flyer, or a website that includes general stormwater educational information, a general description of the permittee's SWMP, and/or information about the permittee's stormwater management activities.	Applicant	Scott Small	717-637-0411	<input type="checkbox"/>
	4	Distribute stormwater educational materials and/or information to the target audiences using two methods annually.	Applicant	Scott Small	717-637-0411	<input type="checkbox"/>
#2 – Public Participation and Involvement	1	Develop, implement and maintain a written Public Involvement and Participation Program (PIPP).	Applicant	Scott Small	717-637-0411	<input type="checkbox"/>
	2	Provide adequate public notice and opportunities for public review, input, and feedback prior to adoption of any ordinance, SOP or plan required by the General Permit.	Applicant	Scott Small	717-637-0411	<input type="checkbox"/>
	3	Regularly solicit public involvement and participation from the target audience groups using available distribution and outreach methods.	Applicant	Scott Small	717-637-0411	<input type="checkbox"/>
#3 – Illicit Discharge Detection and Elimination	1	Develop and implement a written program for the detection, elimination, and prevention of illicit discharges into the regulated MS4.	Applicant	Scott Small	717-637-0411	<input type="checkbox"/>
	2	Develop and maintain a map of the regulated small MS4's outfalls and surface waters.	Applicant	Scott Small	717-637-0411	<input type="checkbox"/>
	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 existing 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.	Applicant	Scott Small	717-637-0411	<input type="checkbox"/>
	4	The permittee shall conduct outfall field screening, identify the source of any illicit discharges, and remove or correct any illicit discharges.	Applicant	Scott Small	717-637-0411	<input type="checkbox"/>

Minimum Control Measure (MCM)	BMP #	BMP Summary	Responsible Party	Contact Name	Contact Phone No.	MOU or Agreement?
#3 – Illicit Discharge Detection and Elimination (continued)	5	Enact a Stormwater Management Ordinance (municipal permittees) or SOP (non-municipal permittees) to implement and enforce a stormwater management program that includes prohibition of non-stormwater discharges to the regulated small MS4.	Applicant	Scott Small	717-637-0411	<input type="checkbox"/>
	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.	Applicant	Scott Small	717-637-0411	<input type="checkbox"/>
#4 – Construction Site Stormwater Runoff Control	1	If an NPDES permit is required for earth disturbance activities, do not issue a building permit or approval until confirmation that a valid NPDES permit is obtained.	Applicant	Scott Small	717-637-0411	<input type="checkbox"/>
	2	Notify DEP or CCD within 5 days of the receipt of an application for a permit involving an earth disturbance activity consisting of one acre or more.	Applicant	Scott Small	717-637-0411	<input type="checkbox"/>
	3	Enact, implement, and enforce an ordinance to require the implementation of erosion and sediment control BMPs, as well as sanctions to ensure compliance.	Applicant	Scott Small	717-637-0411	<input type="checkbox"/>
#5, Post-Construction Stormwater Management in New Development and Redevelopment	1	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.	Applicant	Scott Small	717-637-0411	<input type="checkbox"/>
	2	Develop and implement measures to encourage and expand the use of Low Impact Development (LID) in new development and redevelopment.	Applicant	Scott Small	717-637-0411	<input type="checkbox"/>
	3	Ensure adequate operation and maintenance of all post-construction stormwater management BMPs installed at all development or redevelopment projects that disturb greater than or equal to one acre.	Applicant	Scott Small	717-637-0411	<input type="checkbox"/>
#6 – Pollution Prevention / Good Housekeeping	1	Identify and document all operations that are owned or operated by the permittee and have the potential for generating stormwater runoff to the regulated small MS4.	Applicant	Scott Small	717-637-0411	<input type="checkbox"/>
	2	Develop, implement and maintain a written O&M program for all operations that could contribute to the discharge of pollutants from the regulated small MS4.	Applicant	Scott Small	717-637-0411	<input type="checkbox"/>
	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 operations to the regulated small MS4.	Applicant	Scott Small	717-637-0411	<input type="checkbox"/>

STORMWATER MANAGEMENT PROGRAM

MOU or Agreement. Attach any Memorandum of Understanding (MOU) or other written agreement that describes the BMP(s) identified above as being the responsibility of another party or a shared responsibility with another party.

Stormwater Management Ordinance. For municipal applicants that are renewing permit coverage, complete the information below and attach the applicant's Stormwater Management Ordinance to the NOI. The box for "Yes" must be checked for one of the three options below. Applicants that lack the authority to enact ordinances and are renewing permit coverage must attach their stormwater management SOP(s).

1.	Has a Stormwater Management Ordinance been enacted that is consistent with either the 2013 or 2022 DEP Model Ordinances?	<input type="checkbox"/> Yes	Date:	<input type="checkbox"/> No
2.	Has a Stormwater Management Ordinance been enacted that is consistent with an Act 167 Plan approved by DEP in 2005 or later?	<input type="checkbox"/> Yes	Date:	<input type="checkbox"/> No
3.	Has a Stormwater Management Ordinance been enacted that meets the requirements of the Stormwater Management Ordinance Checklist (for either 2013 or 2022)? If Yes, attach Checklist (3800-PM-BCW0100g).	<input checked="" type="checkbox"/> Yes	Date: July 16, 2012	<input type="checkbox"/> No

COMPLIANCE HISTORY

Existing Permits – Identify all existing environmental permits issued by DEP or EPA to the applicant in the past five years.

Type of Permit	Permit No.	Date Issued	Issued By
None			

Was/Is the facility owner or operator in violation of any DEP regulation, permit, order or schedule of compliance at this or any other facility? Yes No

If "Yes," list each permit, order or schedule of compliance and provide current compliance status. Use additional sheets to provide information on all permits.

Permit Program: _____ Permit No.: _____

Brief Description of Non-Compliance: _____

Steps Taken to Achieve Compliance	Date(s) Compliance Achieved

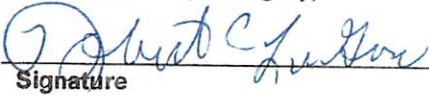
Current Compliance Status: In Compliance In Non-Compliance

CERTIFICATION

I certify under penalty of law and subject to the penalties of 18 Pa. C.S.A. Section 4904 (relating to unsworn falsification to authorities) 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 further acknowledge that the MS4 and operator described herein is eligible for coverage under DEP's PAG-13 General Permit, and will operate in compliance with the General Permit. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Robert C. LeGore
Name (type or print legibly)

Chair
Official Title


Signature

9-11-17
Date Signed

3800-PM-BCW0100g
Stormwater Ordinance Checklist (Final)



**NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
STORMWATER DISCHARGES FROM
SMALL MUNICIPAL SEPARATE STORM SEWER SYSTEMS
STORMWATER MANAGEMENT ORDINANCE CHECKLIST**

The applicant: does does not have an enacted stormwater management ordinance.

MS4 CLIENT/OPERATOR INFORMATION

Organization Name or Registered Fictitious Name

Conewago Township, Adams County

Mailing Address Line 1

Mailing Address Line 2

541 Oxford Avenue

Address Last Line – City

State

ZIP+4

Country

Hanover

PA

17331

Adams

CHECKLIST

Ordinance Provision	2013 Requirement	2022 Requirement
1. Article I – General Provisions. Does the ordinance contain sections for Short Title, Statement of Findings, Purpose, Statutory Authority, Applicability, Repealer, Severability, Compatibility with Other Requirements, Erroneous Permit, or otherwise these concepts are addressed in the ordinance in a manner generally consistent with DEP's Model Stormwater Management Ordinance?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Does the ordinance contain a section for Waivers?		<input type="checkbox"/>
<i>Comments:</i> Incorporated in Chapter 76 of the Township Code.		
2. Article II – Definitions. Does the ordinance include definitions for all critical terms used in the ordinance, including but not limited to Earth Disturbance Activity, Land Development, Stormwater, Best Management Practice, Municipality, and Waters of the Commonwealth?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<i>Comments:</i>		
3. Article III – Stormwater Management Standards. Does the ordinance require or include:		
a. Preparation and implementation of a stormwater management site plan, unless exempted, and regulated activities may not commence until written approval is issued?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. BMPs consistent with DEP's Chapter 102 and E&S Manual?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Notification of adjacent property owners when stormwater flows may be altered on adjacent property?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. Design standards directly or by reference, including the design storm volumes to be used in the analysis of peak flows.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e. A standard earth disturbance area, no greater than one acre, for which E&S requirements including rate and volume controls consistent with Chapter 102 apply?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f. Exemptions for certain activities and an explanation of the municipality's authority to deny or revoke exemptions?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
g. Use of green infrastructure and low impact development practices?	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Ordinance Provision	2013 Requirement	2022 Requirement
h. Acceptable methods to determine pre- and post-development runoff volumes?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
i. Specification of the post-development peak discharge rates for areas covered and not covered by a release rate map in an approved Act 167 Plan?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<i>Comments:</i>		
4. Article IV – Stormwater Management Site Plan Requirements. Does the ordinance require or include:		
a. Specification of minimum requirements for a satisfactory stormwater management site plan consistent with DEP's Model Stormwater Management Ordinance?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Submission of an E&S control plan to the appropriate state or county approval authority?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. The number of site plans needed and to whom the plans need to be submitted?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. Procedures for municipal review of site plans, modifications of plans, and resubmission of disapproved plans?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e. Specification of the term of approval for site plans?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f. Submission of as-built plans and certificates of completion for BMPs?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<i>Comments:</i>		
5. Article V – Operation and Maintenance. Does the ordinance require or include:		
a. Enumeration of stormwater BMPs as permanent real estate appurtenances that must be recorded as deed restrictions or conservation easements that run with the land?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Recording of the O&M Plan as a restrictive deed covenant that runs with the land?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Enforcement by the municipality for failure to perform O&M?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. Prior to final approval of the Site Plan, the property owner must sign and record an O&M agreement?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e. If the owner fails to maintain the BMPs, the municipality may conduct the maintenance and charge the owner fees?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f. A financial guarantee for timely installation and proper construction of BMPs or facilities specified in the Site Plan?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<i>Comments:</i>		
6. Article VI – Fees and Expenses. Does the ordinance indicate that a review fee may be required for a Site Plan to include administrative costs, review costs, attendance at meetings and inspections?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<i>Comments:</i>		

Ordinance Provision	2013 Requirement	2022 Requirement
7. Article VII – Prohibitions. Does the ordinance require or include:		
a. A general prohibition on non-stormwater discharges from entering the municipal separate storm sewer system.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Authorized and Non-Authorized Stormwater Discharges:		
Consistent with the PAG-13 General Permit effective on March 16, 2013 (“General Permit Coverage and Limitations”)	<input checked="" type="checkbox"/>	
Consistent with the PAG-13 General Permit effective on March 16, 2018 (“Discharges Authorized by this General Permit”)		<input type="checkbox"/>
c. A statement that roof drains and sump pumps shall discharge to infiltration or vegetative BMPs wherever feasible?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. A prohibition on altering BMPs, facilities or structures that were installed under the ordinance without written approval of the municipality?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<i>Comments:</i> Items are in Article III of Chapter 76 of the Township Code		
8. Article VIII – Enforcement and Penalties. Does the ordinance require or include:		
a. A provision authorizing right-of-entry to inspect BMPs and facilities regulated by the ordinance?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. A specification of inspection frequencies of BMPs and facilities regulated by the ordinance by the landowner, owner’s designee or municipality?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Transmission of written reports concerning inspections to the municipality?		<input type="checkbox"/>
d. A statement that it is unlawful for a person to undertake any regulated activity except as provided in an approved Site Plan or otherwise exempted?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e. Identification of reasons for a municipality’s suspension or revocation of any approval or permit, and procedures to reinstate a suspended approval?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f. Specification of penalties for violations of the ordinance?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
g. Appeal procedures?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<i>Comments:</i> Items are in Article VII of Chapter 76 of the Township Code		

If a stormwater management ordinance has not been enacted, by what date does the municipality anticipate that an ordinance will be enacted?

If a stormwater management ordinance has been enacted, and the answer to any question above is No, by what date does the municipality anticipate that revisions to the ordinance will be enacted?

Other Comments:

CERTIFICATION

I certify under penalty of law and subject to the penalties of 18 Pa. C.S.A. Section 4904 (relating to unsworn falsification to authorities) that this document was 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.

Responsible Official:

Donald A Knight
Name (type or print legibly)
[Signature]
Signature

Vice Chairman
Official Title
August 21, 2017
Date Signed

Municipal Solicitor:

James T. Yingst
Solicitor Name
[Signature]
Signature

Solicitor for Conewago Township
Official Title
August 21, 2017
Date Signed

Conewago Pollution Reduction Plan

Conewago Township, Adams County Pennsylvania

Pollution Reduction Plan



*Excellence Delivered **As Promised***

September 2017

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Conewago Township Pollution Reduction Plan

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Appendices

Appendix A	PADEP MS4 Permit Requirements
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Conewago Township Pollution Reduction Plan

Introduction

The Pennsylvania Department of Environmental Protection (PADEP) requires all municipalities and most non-municipal entities in Pennsylvania with regulated small Municipal Separate Storm Sewer systems (MS4s) to apply for National Pollutant Discharge Elimination System (NPDES) permit coverage. MS4s that do not discharge to a Total Maximum Daily Load (TMDL) body of water are eligible for NPDES PAG-13 General Permit Coverage. A Pollutant Reduction Plan (PRP) is required with the PAG-13 General Permit for MS4s that discharge into any waterways that are considered "impaired" according to PADEP's latest Integrated Water Quality Monitoring and Assessment Report. As defined by the 2010 United States census, Conewago Township, Adams County is within an urbanized area, thus qualifying the Township's storm sewer system as a regulated MS4. According to PADEP's MS4 Requirement's table, as seen in Appendix A, Conewago Township does not discharge to a local Total Maximum Daily Load (TMDL) body of water and is thus eligible for an NPDES PAG-13 General Permit; however, the Township does discharge into impaired waterways, thus requiring a PRP. PADEP sent a letter dated May 3, 2017 notifying the Township that they are in the MS4 program beginning in 2018 and would need to follow the guidelines to submit for NPDES permit coverage. A copy of this letter is in Appendix B.

Public Participation

The Township accepted a PRP draft on July 17, 2017 for public review. This draft was then posted to the Township website with a hard copy available at the Township Office for public review from July 27, 2017 to August 27, 2017. In addition to posting this information on the Township website, two notices were published in the local newspapers, the Gettysburg Times on July 1, 2017 and the Hanover Evening Sun on July 2, 2017, advertising a public meeting to discuss the draft PRP on July 26, 2017. The notices detail relevant background information and identify where the draft PRP can be found to review and how to offer comment. A copy of the advertisements, a copy of the July 26th meeting minutes which includes a questions and answers summary, a copy of the presentation from the July 26th meeting, and a sign-in sheet for the July 26th public meeting are located in Appendix C.

The Township did not receive any comments about the PRP during the public review period from July 27, 2017 to August 27, 2017.

Map

Drainage Basins

The Township is located in the southeastern part of Adams County in southcentral Pennsylvania. The Township adjoins Hanover Borough, York County to the east, which has strongly influenced development activities in recent decades. The Township has an irregular shape that has an east-to-west width of almost 3.1 miles and a north-to-south length of nearly 4.9 miles. The Township surrounds McSherrystown Borough. The Township contains approximately 10.5 square miles or approximately 6,720 acres.

A drainage basin consists of the streams and associated adjacent area that discharges surface water to a particular body of water. The Township has three (3) local drainage basins in the MS4: South Branch of the Conewago Creek, Plum Creek, and Unnamed Tributaries to the South Branch of the Conewago Creek.

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The Township is currently engaged in an effort to more fully map their stormwater collection system. For the purposes of this plan, the “skeleton” version of the map, which is one dimensional and consists only of inlets and basic pipe connectivity with outfalls, is deemed to be sufficient. The ultimate goal of the Township is to develop a map that allows rapid hydraulic analysis for drainage projects, serves as an inventory of the Township’s stormwater assets providing a platform for the Township to more effectively keep records, track improvements, and store data (CCTV, inlet cleaning reports, etc.). The current version of the map was utilized in this effort to ensure that drainage basins were properly delineated as storm sewersheds for the purposes of pollutant reduction planning. A map of the Township’s sewersheds is provided in Exhibit A.

Of the three drainage basins within the Township, two impaired waters have siltation impairments requirements: Plum Creek and the South Branch Conewago Creek. Additionally, the Township is within the Chesapeake Bay drainage basin, resulting in an additional impairment requirement. The impairment requirements are further discussed in the following section, “Pollutants of Concern”.

Planning Area

The Township’s MS4 planning area includes the Urbanized Area (UA) as defined by the 2010 US census and any area upstream of the UA within a storm sewershed. The UA is approximately 3,233 acres as determined by the PADEP “Statewide MS4 Land Cover Estimates”, provided in Appendix D; however, approximately 56 acres are located outside of the Township boundaries and therefore are not included in the Planning Area.

In order to develop the Planning Area, the UA was expanded to include the Township’s Plum Creek Park and any portions of the storm sewersheds that were upstream of the UA. This increased the planning area to 3,587 acres. Per the PRP Instructions Attachment A, “Parsing Guidelines for MS4s in Pollutant Reduction Plans”, land area associated with PennDOT roadways have been parsed out from the planning area. Existing GIS information allowed for 52 acres of PennDOT roads, as depicted in the PennDOT map provided in Appendix E, to be identified and parsed out for a remaining planning area of 3,535 acres. Approximately 53% of the Township is included in the MS4 planning area as depicted in Exhibit B.

Table 1. Planning Area Calculation

Category	Acres
Urbanized Area (UA)	3,233
UA outside of the Township	-56
Upstream of UA	310
Plum Creek Park	100
State Roads	-52
Total	3,535

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Pollutants of Concern

Since the Township is within the Chesapeake Bay Watershed and the only local impairment is siltation, the Chesapeake Bay requirements govern the pollutant reduction requirements. The Chesapeake Bay PRP pollutants of concern are sediment (10% reduction requirement), total phosphorus (5% reduction requirement), and total nitrogen (3% reduction requirement). Since PADEP acknowledges that by achieving the sediment reduction requirement, the total phosphorus and nitrogen reduction requirements will be met; therefore, the Township's PRP requirement is to reduce the sediment loading within the Township's Planning Area by ten (10) percent.

Existing Loads

In 2016, Gannett Fleming completed a Stormwater Fee Study for Conewago Township, providing a detailed evaluation of the impervious and pervious cover across the Township. In the fall of 2014, the Township contracted a photogrammetry company to obtain low elevation, high resolution aerial imagery of the entire Township. The aerial imagery was collected and post-processed by the photogrammetry company and loaded into a Geographical Information System (GIS) database to allow the Township to assess impervious coverage. This imagery enabled the Township to develop an up-to-date and accurate assessment of impervious surface area to serve as the basis for a stormwater service/user fee. The impervious coverage was analyzed in two generalized groups: single-family residential and non-residential properties. The impervious surface area for a sample set of single family residential parcels was analyzed to determine the "average" impervious cover. This impervious surface area value is considered to be a single Equivalent Residential Unit, or ERU. The 2,700+ residential parcels are then represented by a statistical average of the 217 sample residential parcels, which equates to just less than 10% of the properties. All non-residential properties (commercial, industrial, apartments, government, etc.) were individually analyzed for impervious area. These non-residential properties have highly variable impervious coverage, which made it necessary to analyze each one. The Township has less than 200 such properties.

In establishing the existing sediment load across the planning area, three methods were evaluated: Mapshed, WikiWatershed, and the PADEP Simplified Method. While the Mapshed and Wikiwatershed models provided similar results for baseline calculations, the models were not able to process the detailed GIS information created as a result of the 2016 Township Stormwater User Fee Study; they required a lower resolution spatial information data set. This lower resolution of the spatial analysis of the two models would not provide the level of detail to be required to assist the Township in assigning credits to user fees with the installation, operation, and management of best management practices (BMPs) as many are anticipated to intercept small drainage areas. The PADEP Simplified Method provided the best method to determine existing and future sediment loading by allowing the finer resolution GIS data to be processed and allowing it to be used for the potential credit processing for landowners in the Township after implementing BMPs.

To determine the percentage of impervious and pervious cover across the Township for the PADEP Simplified Method calculations, the GIS layers resulting from the Township's 2016 Stormwater Fee Study were evaluated. The total UA covers 3,233 acres; however, approximately 56 acres are not located within Township boundaries, resulting in an adjusted total area of 3,177 acres. Within the UA, the number of the single family residential properties was tallied up and evaluated at the average impervious land cover

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of 1 ERU: 3,664 square feet. The total impervious cover was then determined by summing the impervious areas of the single family residential properties, non-residential properties, and state and local roads within the UA. The remaining land was assumed to be pervious, for a distribution of 681 acres (21.4%) impervious land and 2,496 (78.6%) pervious land. The study results were compared to PADEP's simplified method estimate of approximately 21% impervious coverage and 79% pervious coverage within the planning area of the Township, as estimated in Attachment B of the PRP Instructions (Appendix F).

Table 2. Urbanized Area Impervious Cover Assessment

Category	Impervious Cover (acres)
Local & State Roads	256
Residential Properties (2,454 ERUs)	207
Non-Residential Properties	218
Total Impervious Area	681

Areas outside of the UA (i.e. upstream drainage areas and Plum Creek Park) that are included in the Planning Area have been evaluated as being developed since the Township has high quality imagery and a detailed evaluation of pervious and impervious land cover for these areas. The largest portion of land included in the Planning Area that is not included in the UA is located upstream of a drainage basins to the South Branch of the Conewago Creek and contains some homes and additional farmland that would not be best categorized as 'undeveloped'. In addition, State Roads have been parsed out. The expanded Planning Area, 3,535 acres, is approximately 19% impervious and 81% pervious.

Table 3. Planning Area Impervious Cover Assessment

Category	Impervious Cover (acres)
Local & State Roads	276
State Roads	-52
Residential Properties (2,547 ERUs)	214
Non-Residential Properties	250
Total Impervious Area	688

According to Attachment B of the PRP Instructions, provided in Appendix F, Adams County's developed land loading rates for sediment are as follows:

Table 4. Adams County Developed Land Sediment Loading Rates

Category	Sediment Loading Rate (lbs/acre/year)
Impervious developed	1,398.77
Pervious developed	207.67

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The Planning Area is estimated to create 962,354 lbs of sediment per acre of impervious land and 591,236 lbs of sediment per acre of pervious land, totaling a sediment loading of 1,553,590 lbs. In order to meet the Chesapeake Bay and Impaired Waterway requirements, this baseline loading will be reduced by 10%, or approximately 155,359 lbs of sediment.

Table 5. Planning Area Sediment Loading Calculation

Category	Acres	Sediment Loading Rate (lbs/acre/year)	Sediment Loading (lbs/year)
Impervious developed	688	1,398.77	962,354
Pervious developed	2,847	207.67	591,236
Total	3,535		1,553,590
Required 10% Reduction			155,359